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ABSTRACT

These proceedings from a three-day Texas conference focus on the needs of handicapped students in vocational education. In the keynote speech, Marc Gold asks two questions: How do you distinguish those people who have special needs from those who don't--if you can distinguish: and, Is it possible to think in terms of goals that need to be accomplished and differences between how people get to those goals, rather than thinking about people with special needs? Featured speaker Shirley Price discusses her life as a handicapped person and stresses the need to perceive people as themselves and not as their handicap: to break down stereotypes and prepare handicapped students for real employment in jobs that exist, not just create programs because they sound good. Twenty-seven presentations are then given in the following subject areas: legislation and litigation: secondary and postsecondary administrative concerns (such as research issues, advocates vs. educators, and modifying programs for the handicapped): teaching concerns (competency-based instruction, classroom management, safety, and teaching emotionally disturbed students): vocational assessment: employment: and specific handicapping conditions. Finally, featured speaker Marc Hull summarizes the issues discussed during the conference. (Addresses of all conference participants are included.) (KC)

PROCEEDINGS

FOURTH ANNUAL STATEWIDE CONFERENCE ON VOCATIONAL SPECIAL NEEDS

"Building Toward More Effective Vocational Training For Special Needs Students"

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ACKNOWLEDGMENTS

As the 4th Annual Conference on Vocational Special Needs drew to a close, it was interesting to contemplate how far we had come in just four years. Particularly significant is the fact that we have grown from talking about handicapped persons to talking and listening to handicapped persons. We, in Texas, have been allowed this growth because of the commitment to Vocational Special Needs by leaders at Texas Education Agency such as Eleanor Mikulin, Pat Lindley, and Robert Caster.

The conference has progressed because of dedicated persons who served on our advisory committee. Members were:

Bob Alcorn
William Bell
Donald L. Clark
Bill Grusy
Larry Jeffus
Jan Kanda
Foy Page
Eleanor Mikulin
Frank Perdue
Richard Pulaski
Alvin Seher
Barbara Terrell
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Chairpersons, deserving a heart-felt thanks, include:

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Barbara Shine, Continuing Education
Sharon Welch, Printing Center

The presenters, whose remarks are included within this volume, researched and presented valuable information in interesting and diverse ways. The participants responded very well by discussing ideas, asking questions and relating personal experiences.

But the people who I must thank are those who worked so long and hard to make certain that the conference was a success. The Vocational Special Needs staff at Texas A&M University is a nucleus of dedicated individuals striving to make vocational education a reality for all students. The way that Janetta Bates, Tina Westphal, Lisa Scott, Kay Lunsford, and Debbie Teguns used clerical and personal skills went well beyond the expected workload of most secretaries. Weekends and evenings were given up when deadlines needed to be met. Raena Wharton, Nan Crowell, Lindy McDaniel, Kenne Turner and David Gill all worked incredibly well as a unit to provide assistance to schools, students, and faculty in the Vocational Special Needs area. Thanks are also due Donald L. Clark, Associate Dean of Research in the College of Education, for his unfailing support.

Primary appreciation must go to Marilyn Kok, who has writing, budgetary and organizational skills, leadership qualities, and a genuiness of character that makes her a delight to work with. As associate project director, Marilyn took much of the worry away by doing the work and leaving the glory to me.

It is with gratitude that I thank you all personally for attending our conference. With these proceedings go my best wishes for your success in preparing handicapped students in vocational education.

Linda H. Parrish

INTRODUCTION

When in January, 1977, the Vocational Special Needs Program at Texas A&M University co-sponsored a conference on vocational education for the handicapped, 50 participants were expected. Two hundred attended. With evaluations such as, "This is the finest workshop I have attended in many years," project staff at Texas A&M were encouraged to present a second statewide conference in 1978. The second and third conferences sponsored by the Vocational Special Needs Program at Texas A&M were equally well received, with keynote speakers such as Frank Bowe of the American Coalition for Citizens with Disabilities and Bud Keith of the Office of Civil Rights. Teachers, counselors, and administrators, representative of the many fine vocational and special educators in the state of Texas, also spoke at these conferences, sharing their experiences, insights, and advice.

This volume brings you the proceedings from the fourth statewide conference on the needs of special students in vocational education. Once again keynote speakers have come from across the United States to address the educators of Texas, including such innovators as Marc Gold and Marc Hull. And once again, the conference rests the majority of its claim to quality on the shoulders of the educators of Texas themselves.

Speakers were chosen to address the needs of anticipated participants: administrators, counselors, and teachers in the secondary and post-secondary levels of vocational education. Topics were chosen to address the wide variety of concerns and questions raised by the vocational education of handicapped students: from funding to employment, teaching techniques to recent litigation. We trust that these pages will bring solutions to these concerns and answers to these questions.

We want to give a special acknowledgment to those speakers whose presentation, whether because of faulty equipment or excessive background noise on tapes, have not been included in this Proceedings. These speakers include Nan Crowell who gave a nuts and bolts approach to teaching the learning disabled student; Don Hancock who spoke on the timely topic, "The Role of the Vocational Counselor in the Vocational Assessment Process"; Elise Millikin who discussed employability techniques; Bill Grusy who shared the resources and services available from the Post-Secondary Division at the Texas Education Agency; Althea Choates who gave an excellent presentation on developing and coordinating interagency support; Melinda McKee who presented "Up the Mainstream Without A Paddle: Educational Support Services for Deaf and Other Disabled Students"; Ron Trull who spoke on the role of the Texas Rehabilitation Commission; and Frank Thompson who gave an employer's perspective on the vocational training of handicapped students. It is with deep regret that we must omit these presentations.

We have arranged the other presentations under topical headings, for your easier use. Addresses of all presenters have been included at the back of the Proceedings.

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CONFERENCE WELCOME

ELEANOR MIKULIN, DONALD L. CLARK

To welcome not only participants to the conference but also readers to this Proceedings, we invited representatives from the Texas Education Agency and from the College of Education at Texas A&M University. Eleanor Mikulin is coordinator for special needs with the Division of Occupational Education and Technology at TEA; Donald L. Clark is Associate Dean of Research with the College of Education at Texas A&M.

Mikulin: As I look over the audience, there are a group of people I recognize from special education days. Today I will share with those of you who do not know, I have joined the Vocational Division working for special needs students; we are still working for the same group and will be working together.

It is a pleasure to welcome you to the Fourth Annual Vocational Special Needs Conference. I bring you greetings from the Department of Occupational Education and Technology of Texas Education Agency in Austin. Mr. Caster, our new Associate Commissioner, will be with us tonight and again tomorrow for his presentation. Those of you who have not met him will be pleased to do so when he does arrive. This program has been jointly developed by people from special education, vocational education, and vocational rehabilitation. The steering committee included people from the local district, from the state agency, plus, college and university personnel. I see all of you represented here today. We hope that the conference will meet the needs of all of these groups.

I am sure all of you have heard that there have been changes taking place at Texas Education Agency. I would like to mention that I think the changes are positive and that in the future I think the group we work with, the vocational special needs group, will benefit from any of the changes taking place. Again, welcome from TEA.

Clark: On behalf of the College of Education and the administration of Texas A&M University, I, too, want to extend a word of welcome to you as you visit your land grant university. We trust that this conference will be, in the true spirit of our land grant tradition, a service to you, the constituents of our state.

Let us look at the title on the front of our program. As we think of the word building, or in fact any word that ends in "ing," we are talking about doing something — the word is action oriented. "Building Toward More Effective Vocational Training for Special Needs Students" does not say that we are building training programs. It says we are building *toward*, which means there is something already there. If we are going to be "more effective," there must be something already going on, otherwise we would just say we are building programs. So we know that there is something going on out there. The very fact that you are here is because you are associated with what is already there.

But is what is out there the best? Can we make it more effective? I think that is what the program staff had in mind as they put the title together: building a more effective training program. As we think through that, and as we meet together through the next two and a half days, we must think about what we want to take home from this conference to assist us in our task of building a program to meet the needs of the young people in our local communities.

It is excellent to come together as a peer group, to get all charged up at a conference such as this, to get the adrenalin flowing, thinking we are going to go home and do something. Then we get home, and we face all the things that have accumulated on our desks while we were gone. All of a sudden the material we gained from the conference slips in the background a little. Has it really accomplished anything? As you start this conference (rather than as you end it), I would like to challenge you. As you hear the presenters, as you participate in the small sessions, as you interact with your peers in social sessions, try to identify at least one thing that you in fact are going to take home and put the *ing* form on in an action oriented manner.

Maybe some of you have heard me use this analogy previously, but I think it bears repeating even if you have. At this conference, we are going to present you with some information. You will gather an information base while you are here. In some of your sessions, or as you ride home and talk about it with your peers, and internalize that information, it starts to become knowledge. But it is only after you apply that, use that, internalize that information, does that information ripen into wisdom. I hope that a great deal of wisdom emanates from this conference.

FEATURED SPEAKER

MARC GOLD

Nationally recognized for developing the "Try Another Way" training technology, Marc Gold promises to bring practical methods for meeting the learning problems of handicapped students in vocational programs. Because of this researcher, educator, and scientist, hundreds of otherwise institutionalized, unproductive citizens have become self-sufficient employees. In his vocational training areas, he is especially noted for achieving industrial-level standards and above.

The concept of special needs is a bit confusing. If there are people who have special needs, then there must be people who do not. However, I have not met them yet. In a vocational school one time, as I was walking through a shop I saw a young man whom I would imagine was labeled normal. I did not get close enough to see if he was moderately, severely, or profoundly normal, but he was probably labeled normal. This young man was standing at a grinder with a drill bit in his hand. The teacher was off to one side doing some things that the teacher needed to do, so this guy was standing there alone. He was leaning up against a grinder with the drill bit, putting it into a chuck, tightening it down, and trying it out with a drill press. It would smoke and turn purple, and then he would bring it back and try it again. At one point, he hit the right angle and went over and started to cut, which was a real exciting thing for him, but I found that he did not have any idea why.

As I stood there, I said to myself, "Here is a young man with some special needs. He has a very special need right now to efficiently and effectively learn how to sharpen a drill bit. If somebody would take two minutes of quality training time, he would know conceptually what it is to have a sharp drill. He just needs a very simple lesson in angles and not much else. Then he would have not only a conceptual base, but the actual technical skill to be able to do it, to be able to test it, and replicate it." I was convinced that here certainly was a student with special needs.

When we talk about people with special needs, we are using one of the current buzz words. We used to have other buzz words. In the Los Angeles city system you had initials. You had "R," "N," "S," for rapid, normal and slow learner. The initials did not fool anybody; everybody knew what they meant. I could spend the rest of this time just going through our vocabulary. But a vocabulary does mean things happen very much different than when we did not have so big a vocabulary.

If we are going to talk about special needs, then there are at least two things that we need to discuss. First, how do you distinguish those who have them from those who do not? Or a more basic question, *can* you distinguish? And secondly, is it possible for us, instead of thinking about people with special needs, to think in terms of goals that need to be accomplished and differences between how people get to those goals and how people accomplish those goals? We are going to cover these two issues.

Let's start by taking the issue of special needs. If we were going to talk about the alternative to "special," we could probably use the word "normal." Who is normal? What is it? What does it mean? It means that you are in instead of out. That is all that normal means. Normal means that you are in society instead of out of it, in jobs instead of out of them. For those of you who wish to be members of families, it means that you are in families instead of out of families. That is what normal means.

But normal means something else, too. Normal means that you are what everybody is used to. How does that make you feel? That is really what you are, what everybody is used to. You do not bring any negative attention to yourself. They say the way you get to be normal is to have six of these and three and four of those until you add up to everyone else.

That does not seem to make any sense at all when you look at each of us. Each of us is a little different. The way we get to normal is really a balance. It is not adding up a bunch of stuff, but balancing a bunch of stuff. We balance the things about us that are lovely and the things about us that are lousy. We have both lovely and lousy; every single one of us does. There are things about us that have to be tolerated, and things that are deeply appreciated. Each of us has our own collection of both and our collection is unique. No two people have the same collection or the same balance.

The terms that we use to describe those things in the Try Another Way system are "competence" and "deviance." When we use the word *deviance*, we use it to mean anything that brings negative attention. It is an operational definition, not a moral one. If something makes somebody uncomfortable, then that something is deviant.

Incidentally, what makes people uncomfortable changes all the time. There is not a thing that you can name that is universally uncomfortable. What if I said, "Is murder deviant behavior?" Not in war. Out on the front line, if the person next to you is not firing at the enemy, you might shoot him in the head. That's how deviant it might be *not* to be doing that. How about fantasizing? Is fantasizing deviant? You might go to parties where it is not deviant. People in a psychiatric institution might look at you and say, "What is the matter with her? She has only one place to be. I have three or four places and can choose. She always seems to be right here. There's something strange about her!"

So things that cause negative attention change all the time, but there are a lot of things that for a lot of the time and for most of us cause discomfort. You, the speech therapist, walk into a department store, and the woman behind the perfume counter says, "C-c-can I help y-you?" This causes discomfort even though you work with articulation problems all day long. You say to yourself, "I hope my face is showing that I am more interested in what she said rather than in the way she said it."

Suppose you are walking down the street. As a teacher of physically handicapped people, you have been around wheelchairs so long your toes are flat. But here comes a person in a wheelchair. You are a pro. You say to yourself, "I could go up there and open the door, but what if this is one of those people who says, 'Thank you but I can do it myself?'" So you know what you do? You window shop next door. How come? To avoid the whole question. So deviance is the thing that brings negative attention.

When I use the word "competence," I use it to mean something that people have, but that not everyone has, something that is wanted and needed by someone else. The balance between competence and deviance, I describe as the "Competence Deviance Hypothesis." The Competence Deviance Hypothesis says the more competence an individual has, the more deviance will be tolerated in that person by others. Let us say that we have zero right here, where no one has decided whether a person is a good guy or a bad guy. On this side of zero is competence, on this other side is deviance. You and I have a little arrow inside our heads. It is one of the most active things we have going. All the time that arrow is adjusting based on input. Remember Richard Nixon? What did we do with him? If we consider competence, there is not enough space on the scale to describe all of that man's competence. Just read the books — phenomenally competent man. But there is not enough room over on the other side either. For years, where was his arrow? Way on the plus side. He was President of the United States! And then one day the American people said, "Mr. Nixon, there just is not enough foreign diplomacy competence to outweigh all that domestic deviance. Get out." The arrow swung down below zero.

What happened then? We got a president who was right at zero. Had nothing over here, nothing over there, he was right in the middle. Now did I say something bad about Gerald Ford or something bad about Richard Nixon? That is the interesting thing. Listing the good and the bad really does not matter until you add them both up. That determines where the arrow lands. You can have a Nixon who can have tons and tons and a Ford who has ounces and ounces and that still does not tell you where the arrow will be.

How about spouses? A bunch of you are spouses. There are things about you as a spouse that stink. Just ask your spouse. But there are things about you as a spouse that are really lovely. You can check those out, too. There are some of you here who used to be spouses, and you are not anymore. The competence deviance hypothesis says that, for one or both parties at some time, those things that had to be tolerated began to outweigh those things that were valued and the arrow went below zero. Do you ever hear somebody say, "How can she live with him?" Next time you hear that, say, "What is it about him that we do not know that is so fantastic that she lives with him?" It has got to be there. She is living with him, so that arrow is a plus.

It is the same with people labeled special needs, handicapped, retarded, cerebral palsied, blind, deaf, etc.. They are in the same situation we are in. All they need to make it are more pluses than minuses. What is the difference? The difference is that you and I do not have as many minuses given to us. We do not have the big set of liabilities that keeps tugging on that arrow. Those people do, and that is the only difference. When we look at deviance a little more closely, we find that there are three kinds of deviance, three things that bring negative attention. The labels that we give them are not really important here. I will use the labels, but it is the concepts that are important. The first kind of deviance is what I call public elected deviance. Those are things that bring negative attention that a person can choose to have or not have. Part of the process of growing up is deciding what not to do any more. You remember when you were a kid and your mother said, "Don't eat your soup with a fork." Or, "Whatever you did the last time you went to town, don't. I got three phone calls." You learn as you grow older that there are certain things that you think are all right, but every time you do those things, people get on your case. So you decide not to do them any more. Public elected deviance means you can choose.

The second kind of deviance is private deviance. Private deviance is wonderful. People do things that they think are okay to do, but God forbid anyone else should know! I used to give examples; I do not do that anymore. I would say, "For instance" and then 18 heads in the audience would go down or you could see the red coming. If you want to get a feeling for what I am talking about, you can take my self-administered test of private deviance. Say to yourself, "What are things that I do, and I really do not think anything is wrong with them, but I hope no one ever knows that I do them." If you cannot think of any, by the way, you are leading a very dull existence.

There are some interesting things about private deviance. First of all, it is free. It does not affect your arrow. Nobody knows about it. You do not have to pay for it, you do not have to have an account of assets to balance against it, unless it comes out of the closet, out in the open. And we have all seen that happen.

Here is a beautiful example of the competence deviance hypothesis; somebody in town does something and it is not cool. You hear people say, "He did what?" Then one of two things will happen. People will say, "Well, then, he is out! I am not going to shop in his store. My children cannot play with his. I will not vote for him." That means the arrow went below zero, right? The other option is that people will say, "He did? Oh, that is terrible, but you know something? He does this and he did that and did that." You weigh the options and sometimes you end up saying, "That is really disappointing, but he is still OK by me." We balance all that stuff.

When do people with special needs get a chance at private anything, much less private deviance? With most of the people that are called "special needs," especially people with significant handicapping conditions, we are so interested in giving them the good life that we program them 24 hours a day and take from them one of the absolutely basic components of a dignified existence — privacy. How much do you need? There are people who need hours a day. If some of you do not get at least several hours a day (absolutely free and clear of anybody except you), you just do not feel good. Then there are people, like me, for instance, who do not need that much, maybe a half hour, an hour a day, something like that. But what little I need, I need really badly. If I do not get that small chunk of time, I itch. Yet most of the people we are talking about at this conference rarely have a chance for anything that can really be called privacy. Some of you do not get the chance either. It is just not easy to turn around to your spouse and say, "Honey, I really love you, but get out of here. I do not want to be a half at this moment; I want to be a whole. As long as you are here, the best I can do is a half and I just need more right now." Wouldn't it be nice if we could do that without them thinking it is a reflection on them?

Now we come to the third kind of deviance, and that is the one that separates "them" from "us." Public non-elected deviances are the things that bring negative attention, discomfort, but which people cannot elect to have or not have. That woman behind the perfume counter cannot wake up in the morning and say, "I think I will talk nicely today." The person in a wheelchair cannot say, "I think I will walk today." There is no choice.

Who are those people? You come to a conference like this and you see somebody sitting in the front row of the conference and he is not looking at the speaker but at somebody who is moving her fingers around. You see people come in and they are moving with a cane and dark glasses. It is deviant and they cannot elect it. Yet it goes beyond that.

I want to dig down into this because I think there is some insight there into what our jobs are and what it is we are trying to accomplish. When we take a look at things that bring negative attention, public non-elected deviance, there are three

sub-categories there, too. The first one is appearance. Think of the time you have spent around people with special needs, around people with very mild handicapping conditions. Amongst that group, the number of them who have significant physical characteristics is not really high. But for others of you, especially those of you who have worked with moderately and severely handicapped people (if you would get our middle class jargon out of the way for a couple of minutes), you would have to say that a lot of them are really ugly. Ugly. There are a lot of ugly people with special needs. Every one of us has some ugly. You think my nose looks big now, you should see it without the mustache! Yet what do we do with these other folks? When I first got in this business, back in 1960, I did some traveling around, and I thought to myself, "My religious educators lied to me." There really are 11 commandments and they only told me 10 of them. The 11th commandment is: "Thou shalt give all Down's Syndrome people the same haircut." No matter where I went, the barber had beat me there, the same guy, and guess what haircut he picked? Ugly, Ugly! If somebody has little tiny ears and a flat, fat back of the head, of course you are going to give that somebody a butch haircut. Then you can make sure everybody knows. Why would you do that? Now people with Down's Syndrome have gotten a decent hair style, for the men a mustache, or goatee, or both, for the women a little make-up, and glasses with a shaded top across the top of the glasses. I could say to you, "There are five mongoloids in here," and everybody would look and look and you would not find them because the four or five ways you know to recognize them are not there anymore.

Yet when those people walk in the door, their arrow is sitting on the floor before you even find out if they are nice, if they are stinky, if they can talk, if they can work. You just look at them and you say, "Whoa, there the arrow goes." Who has the special needs? Us. If we did nothing more than give them the same courtesies that we give ourselves, that arrow would come up a bunch. Let me give you a nice exercise. Look down at what you are wearing. Now ask yourself, "How many did I try on before I bought this one?" Now when you go back to your programs, pick a person with special needs and see what that person is wearing and then ask, "How many were tried on before they bought that one?" You know that answer: one. All we have to do is give them a little courtesy, We give them convenience, we give them training, but we give them no dignity.

The second kind of public non-elected deviance is any behavior that brings negative attention because of its presence. These are all of those things that people do that make other people uncomfortable. Some people hit other people; they cry a lot; they are constantly running around; they slap themselves; they rock back and forth; they interrupt other people's conversations. Sometimes you will see a list entitled: "Inappropriate Behaviors." Or you will see: "We wish to eliminate inappropriate behaviors."

By the way, the next time you have a student with inappropriate behaviors, be really careful not to assume that student cannot learn. If he cannot learn, how did he get those behaviors? They had to come from somewhere. He was not born with them. He learned them, and if he is able to learn those, he is able to learn a whole bunch of behaviors that people like having around.

So we have this second category of things that bring negative attention that the person just cannot decide to do or not to do. You cannot say to yourself, "If you really did not want to do it, you really would not do it, right?" Well, they are exactly the same way. Yet we sit there thinking, "The stinking little kid is ruining my day. Why doesn't he stop this?" He does not stop it for the same reason that you and I do not. You have to work through those behaviors, train them out, and build other behaviors.

Now we come to the third category of public non-elected deviance. It is the big one. It is all of those behaviors that bring negative attention because of their absence. Why doesn't she go to the bathroom in the right place? Why doesn't he use public transportation in a city where everybody is expected to? Why don't they eat with a knife and a fork? Why don't they dress themselves, brush their teeth, comb their hair, wash their hands? Why don't they sit in my mainstreamed classroom and learn like everybody else? The other two are more conspicuous, but they are not the categories that carry the real weight. When somebody says to you, "We are placing three special needs students in your class," it is not the inappropriate behaviors that get you (because there are not that many of those), and it is not that they look funny. It is that you are sitting there saying, "Why don't these students do this and that?" or, "How come somebody is asking me to get them to do all these things that they do not do? I have already got a full load and now they are giving me another full load."

If you look at the curricula for people with handicapping conditions, you will find that about 90% of it is devoted to teaching those things that if a person does not know, it brings negative attention. These are called zero order tasks or behaviors. If the person *does* know them so what? You combed your hair today, but did anybody congratulate you? You got dressed today. Tomorrow, come to work naked and then watch! All of these things are necessary to avoid the negative consequences of not doing them. Why do we call them zero? Because, first of all, you get nothing for doing them and secondly, you do them to get nothing. You do them so that you do not get negative feedback.

Do you remember when you started brushing your teeth? What was the initial motivation for brushing your teeth? Probably fear. For some people with special needs it is different. You have heard teachers say, "Come on and brush your teeth and I will give you a piece of candy." You started out by fear but a little later on somebody said you could not be in a car pool anymore, so you started brushing your teeth again to avoid the negative consequences. For some of us, brushing our teeth actually took on positive consequences. I do not think there is a person alive who enjoyed the first tooth brushing. But some of us really want to brush our teeth now — especially after eggs. It feels good now, but that is not how it started. For a lot of us, bathing now has nice feelings to it, we enjoy it. For others, it is a zero order task. Every one of us is different.

Where are we with these special needs folks now? I started out with a big arrow and it is down. They do not have a lot going for them and I said that there were three things that seem to make that arrow go down. If we could magically get rid of all the stuff about appearance that brings negative attention, the arrow would come up. Then, I said a lot of them have behaviors that bother the heck out of people. Let's say we could get rid of all of those. We cannot, but let's say that we could. Up comes the arrow. Then let's say that we could list all of the behaviors you need so people do not think you are weird because you do not have them. We learn how to brush our teeth, get dressed, wash clothes, move around the community. Let's say we could teach all of those, which we never will, but let's say that we could. Where would that arrow end up if we could do all of that? Zero. That is the best we could do. Why? What is missing? Competence. Where is it? Something that someone has, that not everyone has, that is wanted and needed by someone else. Until you have that, zero is the best you will ever come up with. That is a problem because if you are at zero, anytime there is even a little minus, where are you? At minus. Which means that

there better be pluses because there will always be minuses, and that we better start teaching pluses.

Let me give you a concrete example of the competence deviance theory. Actually, there are two parts to this story. The first part is the simple version. There is a man in a work activity center (or sheltered workshop) for severely handicapped people. The work activity center has reached the point where they feel they are successful. They have a man who did not know how to work and was not very well adjusted and they have made him very well adjusted at doing nothing. They have brought him to zero. He does not have the retardate shuffle. He does not give the girls funny looks. At lunch time, he does not bother other people, he does not slobber all over. He uses the public transportation system, gets up at the right time. They think, "We are ready to put him on a job."

What kinds of jobs do they put handicapped people on? Zero jobs. So they get him a job in a factory doing the sweeping. He comes in every morning, gets the broom, and he does a good job. He is there for two weeks. He goes up the aisle, goes down the aisle, and sweeps.

After two weeks, a couple of people over on aisle ten go up to the foreman, talk to him and then the foreman goes to the personnel man and says, "We have a problem. You know that guy you hired to sweep? Well, he is a nice guy and I am really proud about the way the workers have been behaving. They have been really nice. But a couple of them came up to me and really feel down. They said every time he comes by their bench, he picks his nose and wipes it on their bench. They are just really down about it and I thought you ought to know."

The personnel man thinks about it and fires him. He says "We cannot have a morale problem. We have a staff of production workers. We would really like to keep the young man, but we just cannot do it."

Now that is not what he is really saying. He really means that anybody can push a broom. And if nobody pushes the broom, the accounts receivables do not go down and he has no loss. That means zero. It is a zero job. If people start sneezing because it gets too dusty, you run down to manpower, pick up a guy, and he comes out to sweep for you.

The second version of the story starts out six months earlier in the same factory. There is a man in that factory who is 64 and a half years old. (Retirement age was 65 when I came up with this.) He has been in the factory for 25 years and he operates a machine in the factory, a machine that would take a minimum of thirty days to train someone to run. Now if the machine does not run, the factory does not go. This man that has been on the machine for 25 years and loves the factory, says to the foreman one day, "You guys are putting me out to pasture in six months. Who is going to run my machine?"

"Don't worry, Harry, we will take care of it."

"I know, but I really want to have enough time to train someone."

"Don't worry, Harry; we've got time."

One evening Harry is at home and his daughter and son-in-law are over for dinner. The son-in-law happens to be the placement coordinator at the work activity center. Harry is lamenting and the son-in-law says, "Hey, Pop, may I ask you a question? Would it do anything to your self-concept if I suggested replacing you with a severely retarded man?"

Harry says, "Son, I am 64 and a half years old. If you think you can do something to my self-concept, try me. What do you have in mind?"

So for the next six months, every night, three men walk into that factory and work on that machine. Six months go by. One noontime everybody gathers around and the little man in the grey suit that you never see comes out of the office and says, "We are gathered here today to honor Harry." He says, "Come over here, Harry. I want to give this to you as a token of our esteem."

And then somebody says, "Hey, what about the machine?"

Silence.

Harry says, "Don't worry about it, I took care of everything. Meet Fred."

They look over and here is this guy who does not look too cool.

"This is Fred. Fred knows the machine. Fred, go ahead."

Fred goes over and sits down at the machine and the machine comes alive. It sounds like Harry is sitting there. What a relief. The man in the grey suit goes back into his office and shuts his door for another 65 years. The other workers go back to work. Harry goes off to look at his watch. And the placement counselor does what they all do: they go sneak and hide and watch.

Two weeks go by. A couple of people over on aisle ten go to the foreman. The foreman goes to the personnel man. The personnel man calls in the custodian and says, "Mr. Custodian, I am really sorry to bother you with this, but I have a new assignment for you. You know the machine over on aisle ten? From now on, twice a week I want you to go over there and clean off the bench by it. I also want you to put a screen up around that machine so that people cannot find out how it is that a person is capable of operating it with one hand."

How many of you know of real people, meaningful, dignified, lovely people, who lost their job for doing nothing more than sticking a finger in their nose? The jobs that we put them on were zero, so anytime even one minus showed up, it was too much. Now do you see the competence deviance hypothesis? Now do you see those two different stories? As long as we keep placing people with special needs onto vocational opportunities that are zero, dead end, bottom level, non-remunerative, non-status, mickey mouse, garbage jobs, we will never get anywhere and that describes about 95% of the jobs that we give those people.

There are now 41 people with severe and profound handicapping conditions working in the city of Philadelphia. They have been on those jobs for approximately two years; they earn between $4 and $12 an hour. They have full medical and all other fringe benefits. They are all members of labor unions. Most of them are making a whole bunch more than most of you. Nobody cares if they look a little funny or talk a little funny or walk a little funny because they get the job done. They stay. Did you know that there are electronics companies in this state that have bench assembly operations with 80% turnover? Do you have any idea what it costs to have that level of turnover? (By the way, an electronics assembly operation is not a mundane task. It is a repetitive task. It is not mundane.) If they have ten jobs, they have to refill eight of them all the time.

You people are trainers, you have been around. How do you "cost out" training? You amortize it over the lifetime of the employee. If you spend $2000 to train the person and he stays with you for 20 years, that is cheap. If you spend $2000 to train someone and they stay there for two months, that is expensive! But that is what is happening. Do you know what we have done for the electronics industry in Texas? We have given them workers that they can train for $3000, $4000 or $5000, but we have given them workers who stay, workers who have a level of quality they have never seen before, a level of commitment they have never seen. And do you know what they are doing? They are putting a million dollars worth of their resources into getting more of them. Not because of 504, but because they are

hurting that bad and they are now finding that they can get people in those jobs who are better than they have ever had before. It is worth whatever it costs.

Let us take one other look at these people. I talked about the person sitting in the front row who is watching sign language and finger spelling, about the person in the wheelchair, about the woman at the perfume counter, about the person with the cane. I think when many of us run across those people in our lives, a three-by-five card pops up in our heads that says, "I am looking at an intact system with one or more malfunctioning subsystems." For some of you, the card says, "She is just like me but her arms do not work. He is just like me but his eyes do not work. They are just like me but..."

That is a nice card. When we have people coming into our vocational special needs programs that are labeled retarded, cerebral palsied, blind, retarded, autistic, we see that card. But when we walk into an institution and see people in cribs who are adults, and see people literally climbing walls, a different card pops up. That card says, "I am looking at a malfunctioning system, not an intact system with one or more malfunctioning subsystems, but a malfunctioning system." For some of us, the card says, "She is not like me. They are not like me."

Now that is a different card. It is a terrible card. Yet, it would not be terrible if you guys had not been sold such a bill of goods all your life. We live in a society that has taught us very well: "If you have an intact system with one or more malfunctioning subsystems, fix it. If you have a malfunctioning system, junk it and get another one." We have learned that lesson to a fault.

Take the automobile as an example. Take three of them. Automobile #1. You drive in at night, pull in the driveway, go in the house, go to bed, come out in the morning, turn the key, nothing. So you call the gas station attendant and he checks it over. He says the battery is dead and your alternator needs replacing. There is no problem with that car. That car will not move one inch and yet you are standing there perceiving it as an absolutely intact system with two malfunctioning subsystems, so there is no problem. What do you do? Fix it.

Car #2. You see these around Texas. You see them a lot in North Carolina. The car sits out on the front lawn, and "sit" is the correct word. It has no wheels, no windows, no hood, no carburetor it just sits. Now imagine the owner saying to you, "It has a brand new set of brakes." Why do you laugh? Because you have learned so well that it is foolishness to talk about an intact subsystem in a malfunctioning system unless you happen to be the junk man.

Car #3. This is the borderline car. Many of you came here in a borderline car. It works. It needs a tune up. The front end needs aligning. It needs a set of tires. It really needs to have the engine rebuilt. And the 8-track is broken. That car has a major problem. The other two kinds have no problems whatsoever. What is the problem with the third one? Deciding what it is: that is the problem. That decision, by the way, is never based on reason. There is no computer program that tells you what to do; all you have got is guts to go on. You finally say to yourself, "Junk it." Once you make that emotional decision, the rest is easy. You justify it. "I have had it for five years. It would just be putting good money after bad. Certainly, if I fix one thing, something else will go. I owe myself a new car." Or you make the other gut decision! "I am keeping it. I love that car. We have been through lots of things together. If I spend $1000 on my car and somebody else goes out and buys a car for $1000, we will see who has the better car." Then your friends say to you, "You are putting a set of radials on *what*?"

It is the same thing with people with special needs. The problem is deciding what they are. Which card is going to pop up? And you know that you cannot do it intellectually. I could give you a new mantra and say, "Now we are all going to repeat, 'They are all intact systems with one or more malfunctioning subsystems!" I could do that, and it would not do anything to you. Do you know what does something to you? When you see these people do something that you never, never thought they could do before. You say to yourself, "If they can do that, what else might they be able to do?" That is when the card starts to break away and not until then. When you see a person with profound mental retardation earning a living, it throws your whole system off because you are saying to yourself, "Wait a minute, if that person is actually earning $5.50 an hour, why the heck am I feeding her at night? Why am I putting clothes on her? How come she is paying as much taxes as I am paying and yet somebody is picking up the tab for her? Something does not fit." And it is not until that happens that we can break things down.

Let us go off in a little different direction now. I would like to make the concepts of competence a little more concrete. Where does vocational education start? At adolescence? I see programs called pre-vocational. The only thing that I see that distinguishes pre-vocational from whatever else they took is that the students are older. I tried to figure out what vocational tasks are. But I concluded that there is no such thing as a strictly vocational task. There are things that people do when they work, but there are none of these that they do not do at other times. Of showing up on time, following directions, following a sequence, interacting with other people, staying in one place at one time, being able to perform sophisticated technical operations, not one is done anymore in a place called work than is done in a place called home. We must start with the babies!

Learning to operate around hot stuff is an important vocational task. How did you learn how to be around hot stuff? We found out that if you set a toaster on a "light" setting that, when the toast popped up, if you put your fingers right down on the toaster it would be hot enough to make you jerk. It would hurt, but there would be no tissue damage at all. So if a handicapped student's fingers go down there and touch it, he is going to learn like you and I did, "Get the heck out of there in a hurry!" Under controlled conditions that lesson will not do damage. That is training.

While we are at it, why don't we teach this person something that means something? Often, the special needs people just sit there and somebody feeds the children and somebody dresses them and somebody does this and does that. What a drag. Then we say, "Oh, we love them and they are so nice and so lovely." Do you know why you hear that so much? There is nothing else to say. How can we respect them? And whose fault is it?

Probably none of you waited until you were forty to learn how to gargle. Are you familiar with Gesell? Most of you have read Gesell's Developmental Schedules. Where does it say that, developmentally, gargling comes in for the retarded at age 40? How many sore throats do we owe retarded persons because we waited until they were 40 to teach them to gargle? Incidentally, you should see the content task analysis for gargling!

It is nice to teach somebody to make a white sauce, to run a lathe, but we also have to teach them about life, about what you and I do in order to make it. These skills are important. Teaching them how to take care of themselves down there and up there and around there should be a part of it, too. Frankly, whether it is special needs or not, we should be teaching that kind of stuff, and yet we avoid it like the plague. Some places now have sex education. We have accepted that the three R's are not enough. I do not care what you call it, it is a part of life that we are missing in the schools.

Special needs people need to, and can, learn saleable vocational skills. One group of people who were never allowed in a sheltered workshop are now doing electronics work. Most of the IQ's are below about 35 or so, so they are not the kind of people you would likely get in a typical vocational needs curriculum. They are people who would be in the programs labeled severe and profoundly handicapped. The work they are doing is for the National Aeronautics and Space Administration. There is a two-minute film in a press release that NASA put out a couple of years ago saying that the quality of their work exceeds the quality of NASA's own workers. They sub-contracted high-quality electronics operations. Do you feel a lot of benevolence for them? No. Benevolence is a badly paved, one-way street. When you hear pity, you think that is a bad word. When you hear benevolence, you think that is nice. You do not want anybody to feel benevolent toward you, do you? You cannot give respect and dignity and benevolence at the same time. Yet you cannot feel benevolence for somebody who is sitting there doing something that you do not know how to do. The special needs people assemble tracking modules for NASA. It is a 550-step operation, and they have never had one product rejected for failing to meet quality control.

You will be getting people like hemiplegics in your classes. Do you know that word: hemiplegic? Some people think that means one side of the body does not work. That is not what it means. It means that one side of the body works differently than the other side. We are not neurologists and we are not neurosurgeons. We are teachers. We say to ourselves, "If one hand can hook around a wheelchair, then it can hook around a thousand different things with a thousand different hooks. We are going to teach the hemiplegic student to hook all over the place." And do you know how we are going to do it? We are not giving him M&M's and saying, "Come on now," and putting happy faces on his forehead. We are saying something like, "How would you like to run the projector?" We could have written a task analysis so that he could do it with one hand. No way. We wrote a set of motions and operations that required the use of both hands. The teacher said to him, "I am willing to teach it to you but you will have to use both hands."

You know the bill of goods he has been sold. He said, "Then I can't."

The teacher said, "Oh, I will show you how."

And now he is using both hands. He is not hurting; there is no pain. There is no magic either. The hand can do things. It is all in the mind of the people who set up the expectancies. If a young man has polio and he has no muscle tone in his arm at all we have come up with a task analysis for the use of one hand. But if he does not have polio, if he has cerebral palsy, and if that hand moves and does things, then our job is to find lots and lots of things for it to do.

There are lots of things that special needs people can learn. One woman with profound mental retardation learned seven machines. All of them were commercial kitchen machines and the ones that were picked just happened to be the seven commercial machines used in the best restaurant in town. After she learned all of those skills, the coordinator went to the owner of the restaurant and said, "I have someone who can operate every machine in your kitchen perfectly. Are you interested in hiring her or not?" The answer was yes. She now has a full-time job. She cannot talk, she has very little language, but she is a perfect employee. I think it would be nice to have some employees who could not talk!

You know you are supposed to raise your voice eight steps when you talk to three year olds and you are supposed to work with them with plastic only. Do you want to see a three-year-old fly? Treat him like an adult whether he is normal or special needs or whatever. We taught three-year-old, multi-handicapped children to assemble a flashlight. Now, of course, we have to give all sorts of reinforcers for doing this, do we not? Wrong. You teach people things that they want to learn, that they are impressed with, that they think are status tasks, and they will learn all day long. They will love it. The teachers do, too. While these people were still three years old, they were learning and enjoying it, and the people around them were saying, "If my three year old, moderately retarded son is assembling flashlights, what might I expect over the next 18 years?" They thought it was much better than, "Well, he is able to sit there nicely while they get his coat off and it takes about 40 minutes to get all the coats off so we can get them ready for juice, and it takes about 15 minutes for juice, and we don't want to be late because if we get them late for juice, then they might miss their nap and we don't want them tird when they get on the bus to go home." An elderly couple living in rural south Georgia said they were not driving any more at night because they had a flat once, could not fix it, and sat there all night. Their retarded son lives with them, so we took their car and taught him to change the tire. Now, instead of having their retarded son in the back, they have this life-or-death, valuable insurance policy in the back seat. They travel around at night now because they know if they have a flat tire, it is OK; he knows how to fix it. That gives him something in the family that he has never had before. He has earned his parents' respect.

There is a concept in the Try Another Way system that I think may have some usefulness to you folks here. The concept is power. Power is part of the philosophical value structure in the Try Another Way approach. We use the term "power" to mean what the trainer must have in order for the learner to acquire the task. We say that the difference between people is not what they are capable of knowing, but what it takes on the part of the trainer in order to get them to know. So if we have two individuals, one of them labeled normal and one of them labeled severely retarded, and we want both of them to be electronic bench assemblers, we take it as a given fact that both of these people are thoroughly capable of being competent, proficient, electronic assemblers. The difference between the two of them is the amount of power that will be required by the trainer to get them there. For the person labeled normal, we assume that it probably will not take very much power on the part of the trainer to bring that person to proficiency. For the person labeled severely retarded, it will probably take a great deal of power on the part of the trainer to bring that person to proficiency, to the same level the person labeled normal achieved.

Where does power come from? Power comes from expectancies. If you do not think somebody is going to do something, you can be sure they will not. It also comes from instructional technology. There are thousands and thousands of tricks that can be included in a trainer's bag. The technological part of our system is an organizational structure for organizing all the decisions a trainer has to make and for selecting what technique the trainer should use.

Power comes from resources. What kind of resources does it take to get power? It depends. We know from experience that if you want to teach a person labeled normal to drive an automobile, the resource you need is individualized instruction, one-to-one instruction. At that particular moment, they are special needs.

What about when you want to teach a person with a mild handicapping condition, let us say a slightly retarded person, to make a white sauce? How much power do you need? Do you know how much power I think you would need? Probably if she was at a stove with three other students that were labeled normal learning to make a white sauce and if somebody had

spent just a little time with the teacher and just a little time with those three students, I will bet they would have all the power they needed not only to learn the white sauce but to make sure she learned it, too.

Do you know what happens instead? In addition to your other students, you may get three students in your class who are special needs students. One of the mistakes we have made with you is we have done a really lousy marketing job, just terrible. You were already busy all the time. Whatever your load was, it was a full load because whatever you get used to is a full load. When somebody comes in and adds more on top of it, that is called more than full. And that is no good. Nobody wants to be more than full. You hear about these teachers who only have 8 students in their class or 10 or 11 or 12. You have 34 students and now you have some of their students in your class.

We need to approach this by recognizing that this concept of power is not power in the political sense, but power in the sense that I am using it here. The questions are simple: What do I want to teach? Who do I want to teach it to? How much power am I going to need? How do I create the circumstance where I have got enough power? That is a fairly simple sequence of questions and it can lead you to some very exciting things. For instance, every student — no matter how easy that person finds it to learn or how difficult that person finds it to learn, whether the person is a gifted student, a normal student, a student with mildly handicapping conditions or with significant special needs — every single student needs some individualized instruction. Every one of them needs some small group homogeneous instruction. Every one of them needs some small group heterogeneous instruction and every one of them needs some large group heterogeneous instruction. Try using one-to-one instruction to teach somebody to get along in a big group. It is not easy. We have one-to-one instruction to teach normal people how to drive, and yet, for things like calisthenics we can have 150 or 200 of them together. You do not need much power for modeling.

What we need is some marketing. People in the area of special needs should find some really genuine reason to be there. Not all of you have. Not everybody thinks they ought to be working with students with special needs. And that is just fine. But the fact of the matter is, most people find some very, very nice personal satisfaction when they can see something positive happen. And when they cannot see positive things happen, how can we stand there and say, "You will really like it"? No teacher likes to stand around watching students fail.

There are some really nice reasons for working with students with special needs when you have the conditions to do it and those conditions are available. You think you need more money, more resources, more teachers? I do not think you do. I think what we have to do is to be more clever, more creative, and use the resources we have. For instance, use your other students. People outside of home economics think that home economics is cooking and sewing and this and that. Yet a lot of the training and the philosophical underpinnings of home economics is an understanding of the family structure and an understanding of life existence and community existence. The home economics teachers that I know find a great deal of personal satisfaction in being able to teach their students the joys and the satisfactions and the feelings of competence that come from helping somebody else. I am not saying that as some sort of altruistic, wonderful, lovely thing. It simply feels good.

If you are going to have special needs students in your classes (and you can forget about the "if" because you are going to) it might as well work out well. Well means satisfying. It means that whatever energies I have to put out, I get enough back that I do not mind putting the energies out. The way to do that is to take your resources, your other students, your curriculum, and say to yourselves, "How do I do this in a way that my job is no harder and I can walk away at the end of the day saying, 'My students are learning more now that these special needs people are here than they did before'?"

Remember, I talked about the drill bit when I got started. I see a lot of shop courses being run so that teaching drill bit sharpening takes three days. The method is basically exposure. You give the students all the necessary equipment and hope that eventually the drill bit gets sharp. You end up with very, very short drill bits. The alternative is to design a powerful training strategy that allows your students with normalcy to learn how to sharpen a drill bit accurately, consistently, and reliably in a matter of five or six minutes of training. You should see what these students do with training. When somebody actually takes the time to plan lessons and think lessons out and deliver really powerful strategies of instruction, you can take a shop with 15 or 20 students, and with individualized instruction and powerful training strategies, you could probably get much higher performance in about 10%, 15% or 20% of the time. I really believe that. Again, that is not a criticism because you have never needed to do that. You have always taught what you needed to in the time you had, which is fine. However, you could be teaching in a way that those students would not only learn everything they are learning now, but would also learn how to teach it to people who have some trouble learning. You would have time to teach a whole bunch of other things with the same resources that you have now.

I am going to add one more point. The one other point that I would like to make is about the "what" that you teach. Since the word vocational is being attached to this conference, I would like to suggest specifically for the students with vocational special needs that you go further than you have gone in assessing the needs of your community for workers. I know that you already do that. What I do not think we have done very much, because I do not think you have really needed to up until now, is to ask yourself, "In this community, where are the jobs that have good salaries, good working conditions, good fringe benefits, but where it is very hard to find employees that stay?" The electronics corporation in Chicago is such a place. They pay good money, they have good fringes, they have good working conditions. But even though there is a 13% unemployment rate in Chicago, there is a 400% turnover on those jobs in the electronics industry. People just do not want to be there. Not only that, the company does their recruiting with people whose value structures just do not fit there. Employees will work until they get some money, then they want to leave; that hurts the electronics industry. You should be able to go into your community, whether it is a small community, agrarian community, rural community, industrial community, and say to yourself, "Where are some jobs that if my students with vocational special needs really knew how to do those jobs excellently, they would have a beautiful start in the world of work?" Then train for them. I think that area is not being tapped now that the field of vocational education is starting to take special needs students seriously.

You got the legal mandate a number of years ago; you ignored it for a long time; then did not quite ignore it, but just found a way to bootleg what you really wanted to do and call it training. Now, I get the impression that in the field of vocational education there are a lot of people who are starting to say, "Let's do something. Let's really try to accomplish something and see if we can get something done." Now that is happening, one of the places that has to be addressed far, far, more directly than it has been, is finding those jobs. I would suggest that you do not accept anything less than really decent jobs. The temptation is to take the poor jobs. Going back to the competence deviance hypothesis, those are zero-order jobs.

They are not going to last, they are not going to be good working conditions. A lot of times you hear about people being fired from or leaving jobs. If you went out and saw the working conditions they were working under, you would say to yourself, "I cannot believe they stayed as long as they did." The strategy that we use when we are involved in placement is for our staff members to work on the jobs until the supervisors tell us they are perfect workers, until they say, "Your quality is everything that we want, and you are doing everything the way we want you to do it." At that point, our employees then begin to write the task analysis and begin to design the job stations and the job training for workers we are going to bring into those jobs. Until that point, how could we know what we were training for? How could we decide if we really wanted these people who are important to us to even be there?

That strategy is really interesting. A friend of mine does placement in Chicago. A person may say, "I need a commercial dishwasher and I pay $4 an hour and I have a health package and I would love to have one of your employees."

So she says, "Fine, I will start working tomorrow and then when I am performing exactly the way you want me to perform I will bring in the worker and train the worker into the job and I will fade out."

If she finds it so hot there that she passes out, or they do not let her eat on the job even though it is a kitchen and she is there for eight hours, etc., she says, "Thanks, but no thanks. I do not want anybody working in this job. It is beneath the dignity of the people I represent."

We have not done enough of that in this field. We have said, "Hire the handicapped." Nobody wants to be hired because they are handicapped. And as an employer, I do not want any handicapped people working for me. I want competent people working for me and what I have to find out is that competence means this, this, and this. If the person cannot walk, then competence is not a job that requires walking. But if the job is operating a machine and this person who cannot walk can operate that machine as well as anybody I have ever had in the place, what does it matter that he cannot walk? Those are not handicapped workers; those are competent workers if they do all the things I want them to do. So that is the other suggestion that I would like to make: look very, very closely at job placement and find really decent jobs for people. All your work and effort will be worth it.

I am going to stop here as far as monologue. Now I would like to know what you want to talk about.

Audience: What interest and aptitude instrument do you use to assess students?

Gold: None. We do not believe that those things are worthwhile for people with mild mental retardation or negligible language skills. Not only that, we have seen them administered and the tests say, "Would you like to be a lawyer or would you like to be a sanitary engineer?" How do these people know? Can we know what a lawyer does just because we watched "Perry Mason"? The idea that we can sit and ask people a bunch of questions and somehow they will understand, we just do not accept. Not only that, what is wrong with teaching a person how to do a job, teaching him how to do it well, and then letting him say to you, "I am really glad I know how to do this but I do not like it," and going to a next one and a next one and a next one? That is the way you and I did it yet, somehow, we think of that as failure for them. We also are skeptical of those other tests, like manual dexterity tests. In fact, we have done some interesting research on that and, without going into it all, we find that the only form of assessment that makes any sense at all is criterion referenced assessment.

With our form of criterion referenced assessment you say to yourselves as teachers, "What do I want the student to know?" Then you say, "What am I going to do to see that the student knows?" The point where you say the student knows is the end of that assessment. If you have kept records of what you have done, you can pass on to the next teacher a statement that says, "The student knows this and this and this, and this is how I taught him." That is assessment. There are certainly exceptions if you are talking about academic skills or certain kinds of things for which there are prerequisites. For example, if you want to teach somebody to tell time, it makes sense to first find out if they can count from one to twelve and recognize their numerals, because a clock is a lousy place to teach it. That kind of assessment is also criterion referenced assessment. "I want the person to be able to tell time; in order to do that, they must be able to recognize their numerals. I will now enter into a program to either find out if they do or see that they do." Even that is criterion referenced assessment, but you do not ask if they know something unless you are prepared to teach them. That kind of assessment we find extremely valuable.

I have never seen an IEP written about a student. I have only seen them written about the teacher. The IEP really says, "Here is how tired I am." It says, "Here is how much I know about how many students I have and how many hours there are in a day and how difficult my students are to teach. Here is what I know about the context the student is in." I can prove to you that we never write them about the students. What if I said to you, "We are taking all your other students away and now you only have one student. Not only that, his mother and father are taking off work for the year and are devoting themselves 24 hours a day to anything you want them to do. They have said you can move into the house if you want to, they will move into the school; whatever you want. You have one year and you only have the one student. Now go back and rewrite your IEP." Come on. You would go back and say, "Are you serious? We are going to do this, and this and this." Wouldn't you? You would be stuck if you did. I am sure that that is what you would do. What you are really saying is, "The student has not changed, but the context has, so I never wrote the IEP about the student in the first place. I wrote it about me." Once you understand that, then you are not laying the problem on the student. The fact that it only says, "I am going to get three or four things done this year" is a defense mechanism. You are saying, "Look what I am up against." But it is not the student's capabilities that you are writing about.

Audience: There are conventional assessment devices, aren't there?

Gold: What he is really saying is, "Give them a Singer-Graflex, give them a Towers, or a JEVS, or this one or that one." That is what they want to hear. I believe OK. Our profession said, "Evaluate and assess, until you have used up all your money so then you do not have to do anything about it." It is true. We spend much, much more money trying to find out who someone is than we do trying to do something about it. Not only that, when evaluation is your focus of attention, training is not likely to occur. When training is your focus of attention, evaluation must occur; so train, do not test.

When you train a person to use all the equipment in the front office or you train the person to operate machinery in the kitchen or to operate grounds equipment, all of that training should be accompanied by data. You should have a data sheet with the task analysis. It sounds like a lot of work, but once you get into it and start doing it, the rewards are more, and the work ends up being easier, not harder. Your assessment then is, "Here is all the information that shows how this person learned this task." The assessment can say, "This person knows how to do this, here is how we taught him, and here is how many hours and minutes it took." If you feel that the rules require you to do

a Wechsler, a Bennett Handtool, or Bruininks-Oseretsky or a Wechsler Adult Intellegent Scale or whatever, then do what you must, but take that information and make sure that nobody sees it except the people who ask for it, because it does not mean anything, I am serious. I could spend the next three hours explaining to you just how convinced I am that it does not mean anything.

I have submitted reports to a division of vocational rehabilitation in a state in which they wanted intelligence tests, motor dexterity tests, other specific tests. We taught several complex industrial tasks to a person who had very severe cerebral palsy. At the front of the report were pairs of polaroid photographs, one showing the task itself with the products assembled, and the other one showing the person in the middle of assembly. The person was contorted and looked strange. When they opened the report, it said, "Robert So-and-So has learned the assembly tasks shown on the cover of this report." Then, in very big letters (we took a whole page) it said, "He learned in X number of minutes on each of the tasks and his production was X number of units per hour with X error rate; the error rate is zero." The next three or four pages of the report, which were single spaced, included a very detailed description of the methods used to teach him. Somewhere on page three or four (of the 12 or 13 page report), in the middle of a paragraph, in small letters not in capital letters, and not using abbreviations, it said what his full scale intelligence quotient was. There was no way you could have just glanced across that page and found the IQ. Every piece of data they wanted was in the report, but there was only one way to get it. They had to read the entire report. They had to read everything before we would give them even one test score, before we would even tell them that on a standard test like the Purdue Pegboard, he scored below the one percentile. By the time they got to that piece of information, we had already described that he was producing at 98% of the industrial norm on the complex industrial task. Incidentally, he did score below the one percentile on the Purdue Pegboard.

We did not violate any laws. We gave them exactly what they wanted, but we did it our way. We did it in a way in which they had to confront all the person's competence in order to find the conventional items that always show these students to be deviant. So there are a couple of different answers for that situation. It is a real issue, a real problem, but I do not think it is unsolvable.

Audience: When people come to monitor, they want to look at a test or see a test's results. Can you make a suggestion on a test?

Gold: Why don't you use the Purdue Pegboard? That is motor dexterity. Or you could give them the Minnesota Multiphasic Inventory. With twenty severely retarded people, we administered the Purdue Pegboard. Twenty out of twenty produced below the one percentile. It was no surprise; they all do. Then we randomly selected half of them and gave it to them three more times. Nothing happened; we had the same results. For the other ten, we taught the Purdue Pegboard, not quantitatively, but qualitatively. We designed a set of motions for doing the Purdue Pegboard and then taught the ten people those motions. We did not tell them to go fast, just taught them reliable, accurate motions until they did twenty-five of them in a row, not just getting the pin in but following the motions.

Then we gave them the Purdue Pegboard again. We gave it to them a number of times, until the difference between one test and the previous test was less than 5% difference. What does that mean? We violated the standardization of the Purdue Pegboard, didn't we? However, those of you who are in psychometry know that there are four kinds of validity to a test. One of them is called content, one is predictive, one is construct, and the fourth is concurrent validity. Construct validity says that the test is testing what it is supposed to test. The construct behind the Purdue Pegboard is the ability for a person to use their hands. The Purdue Pegboard is based on the assumption that the person will spontaneously generate a strategy. This is assumed because it is for normal workers. Yet, in thirty minutes of training, did we teach motor dexterity? Do you teach dexterity? So we did not violate the construct of the Purdue Pegboard. All we did was adhere to the construct by getting all of the cognitive stuff out of the way. We taught a strategy which everybody else is assumed to have. So we do not think we violated it.

Guess what happened when we were done? The figures are really interesting. When the ten people who went through that training were through with it, their mean performance was 50% of the standard. It is weird because it was not 49 or 51; it was 50. Do you know what 50 is? It is the same as ours, exactly on the money, 50 pecentile. Do you know what the range was? All of them were below the 1 percentile. When we were finished, the lowest performance was at the 20 percentile, the highest two performances were at the 99 percentile. Not one person in a hundred would have matched the performance of two of those people on that test. What that says to us, and it says it just as loud and clear as can be, is that when you get the part out of the way that nobody thought about when they developed the test, the people's hands are no different than anybody else's. But there are not any tests to show that, so we just took one of the tests that everybody relies on, and showed it with that. You might want to do the same; you can do it with any of them.

Audience: Most vocational shops teach generalized training. Most of what you have been talking about is specific training. What do you suggest we do in terms of setting up vocational shops with special needs students?

Gold: I really think that the best possible approach to generalized training is specific training. When you are teaching automotives there are some conceptual issues involved, but at some point that training deals with installing a set of points, doing a brake job. The components of generalized programs almost invariably are themselves specific. My own bias is that if they are not, they should be. It is not until those concepts and general issues filter down to measurable, demonstrable skills that the general program can even be described as existing. With those generalized programs, you can sit back and say, "What are the overall goals of this program?" But the way to achieve those overall goals is to say, "OK, what are the 150 specific tasks that students are going to know when we are done? What pieces of knowledge are they going to hold?" When you approach it that way, and see that a generalized program consists of bodies of specific information, then the difference is really a lot less.

Audience: What about transfer of training?

Gold: If you go through our research, you will find that almost every one of our experiments uses a transfer of training paradigm. We get very significant transfer effects. People with special needs are capable of transfer, and I can say that with a great deal of confidence. Transfers are hard to define and to measure as to what it is being transferred and how you know it is.

Now let me answer it in a different way. It is not necessarily true that if you spend a lot of time teaching someone to take apart a Carter AFB carburetor and put it back together, that he is going to be able to take apart an SU carburetor. He will transfer the ability to remove and insert screws, that is common, he will be able to transfer maybe 60, 70, or 80%, but there will be some aspect of that carburetor that he is going to have to either be taught or learn on his own.

It is the same for students with special needs, maybe more so. The idea that you can assume no transfer is not true; you can expect a lot. If you teach tool usage, incorporate specific tasks. Do you want to teach a person to use a screw driver? Come up with 40 different uses of a screw driver and teach him every one of them very, very well. When he knows all of them, he will probably be able to use the screw driver with anything. He will generalize the knowledge. If you are teaching gasket installation, teach four or five or six different gaskets with accuracy: how to seal them, what compounds to use. Do that very, very reliably, and chances are fairly good that the student will be able to install at least the gaskets for other carburetors even though the student has never seen those gaskets before. Do the same thing for bowl adjustment, etc., etc. There are going to be some peculiarities — for instance, that big accelerator pump on SU carburetors; American carburetors do not have those. You can have all the experience in the world on American carburetors, but when you start fooling around with one of those, the car will not run. That will not transfer. Still, you can expect a lot of transfer if you teach as if you are saying, "I want to teach him a way so that he not only does this correctly, but understands."

FEATURED SPEAKER

SHIRLEY PRICE

Handicapped Coordinator for the Johnson Space Center in Houston, Ms. Price works with over 250 handicapped employees. As such, she has close ties with the school districts in Houston, Galveston, and the surrounding areas, as well as with CETA. In this session Ms. Price, who because of a congenital defect is shorter in stature and has no arms, shares her experiences.

Good morning. It is indeed a pleasure to be here. I do not know if you understand how important it is to handicapped persons that you non-handicapped people understand that we are the ones who are normal. Actually, there was an invasion of our planet and you people came and took over. We decided we were going to let you do it for a little while to see how you were going to make out. But you have been messing up for too long so now it is time for us to tell you how it needs to be done.

I am going to ask you to do me a favor. I want you to close your eyes and think of the person next to you. Think of how that person looks. Do you remember what that person has on? Was the person wearing glasses? Is her hair blond? Is he thin? Is his hair real? Is she thin? Is he bulging out at the belt? Is one foot larger than the other? Is one hand longer than the other? Is one eye smaller?

Now open your eyes. Think of yourselves. You are going shopping and you want a pair of shoes. You wear a size seven but when you try it on you find that one shoe fits, but the other hurts your foot. Think of your hands. Look at your hands. Are all your fingers just alike? Think of your teeth. Are they really yours? Think of your glasses. Think of standing at the mirror at six o'clock in the morning. Now is one side of your body shorter than the other? Are both arms the same length? If they are not the same length, you are actually more handicapped than I am. My arms are the same length and I do not have any hands to look at and compare! Do you understand what I am trying to get you to see? We are so hung up on what we visually see that we do not take time to look on the inside.

Someone once asked me, "Shirley, if you could choose a handicapping condition, which would you choose?"

And I thought, and I thought and I said, "I would like to be seven feet tall and blind."

"Why?"

"Seven feet tall because they can reach anything, and blind because they can look inside another person. They are not concerned with what you look like on the outside."

I was looking at "Good Morning, America" the other morning and heard the question, "What do we do about these young people who are aliens in our country and need to be educated?"

The city councilman's response was, "Do we spend just one more tax dollar to educate them now, or do we spend $15,000 later to institutionalize them for the crimes that they committed because they were not educated and could not get jobs in our country?"

That was a very good answer. My question to you is, "What do you do about handicapped people? Will you leave them out of the classroom and not mainstream them into vocational programs and then pay thousands of dollars to institutionalize them in the next six or seven years so they can stay out of your way?"

I wonder, do you know what is happening in America? Do you know that this year alone I have interviewed over 25 people who were older than 30 years old, handicapped, with no education whatsoever? I call it no education when they leave school at the seventh grade. Why did they leave? One girl said she wanted to be in the pep squad and the school would not allow her because she was in special education. One young man said he wanted to run on the track team and the school would not allow him because he was in special education. One man said, "All I wanted to do was to learn to become a mechanic." He quit school because they would not allow him into the vocational program.

Then there are those who are in vocational programs who have no business being there. Think of a student who has been in the regular classroom for eight or nine years. All of a sudden

that student realizes that they are going to test students to find out where they are academically. The students say, "Hey, if we fail the test we get to go over there in the vocational department and learn how to build a house. Man, that ain't nothing. I'm gonna fail that test. I'm tired of this classroom anyway."

Do you know how many students fail tests just so they can get into the vocational department? Do you know why that is true? Because no one is really stressing the importance of the vocational department. The students think it is a cop-out. Did you know that? Students think it is a way out of the classroom and they think, "I can get by because I do not really have to do much of anything in there." But I know that is not true. I have worked with many students from vocational departments out at the NASA Space Center. I think those of you who work with the Houston Independent School District and the Galveston Independent School District know that there is no way that any student who is in the vocational department can get by with thinking that the vocational department is a cop-out. Students must work. That is why I think vocational programs are fantastic for handicapped persons who need them.

My first counselor and I had an enormous fight that lasted for four years because he said, "Shirley, you have no hands so we want to send you to a vocational school!"

I told him, "No!" There I was, third in my graduating class, and he wanted to send me to vocational school. I asked him why I could not go to college.

"Well," he said, "you don't know how to do this and you don't know how to do that, but you do know how to type with your toes so we want to send you to secretarial school."

Well, thank you but no thanks.

You are the one who can help us get past these attitudes if you would. Yesterday was Mobility Day out here at Texas A&M. How many of you tried out a wheelchair? I have a little nephew who is three years old and he likes to mock me. So he puts his pencil in his toes but he figures that is not enough, so he takes his hands and doubles them back under his shirt so that only his elbows are sticking out. Now he is me. I want to challenge you to be me one day, or even just 15 minutes. I want you to drink coffee, I want you to do your work, I want you to walk around campus and attend the rest of the seminars without using your hands. The elevator controls in this building should be a lesson to you. I can call for them on the outside, but I cannot push them on the inside. In the other building I cannot call for them on the outside, but I can once I am inside. This is private and public discrimination.

There is a lot I can tell you. We have an awful lot of problems. This dress I am wearing, for instance. Did you know that I had to alter this dress three times? Yet the lady at the store did not want to sell it to me. I told her my money was as good as hers. When I shop I see people looking at me like they wanted to say to their companions, "Don't look, please don't look, but do you see that woman over there?"

Children have a much better attitude. "Momma, look at that lady with no arms."

I was shopping one day with my crazy family. My sister said to me, "Hey, these little kids are following us. Are you ready?"

And I said, "Sure." I knew what was coming. She stepped behind me and when the children said, "Hey lady, you know that lady with no arms?" she said, "Yes, I know her, but you see those little things on her arms? At 12:00 you push those things and her hands come out."

The children kept following us around all day long until at 12:00 they said, "Push them, lady, quick push them. We want to see!"

Another time I was shopping and I sat down on a little stand to write a check. A little boy came up and said, "Hey, can I try that?" I did not know what he was going to do but I gave him a piece of paper and a pen and he proceeded to take off his shoes to try to write with his feet. Well, he was not bothering me at all, but before the boy could get his sock off, his mother yanked him up by the arm, hard, and way over her head. I know that hurt him and he started to cry and she started slapping him, and finally the salesclerk turned to *me* and said, "Ma'am, you'll have to write your check in the back room."

I said, "Guess what? You're going to have to hang all these clothes back up again." The lady with the son didn't buy a thing and it was all right for her to stay. But even with $175 worth of clothes I was buying, I had to leave. It was their loss.

Once my entire family went to a restaurant. Can you imagine 18 people ordering food? When we were finally served and everybody was eating, I pushed my chair back and began to eat with my feet. The waiter came up and said, "Ma'am, I'm sorry but you cannot use your feet."

I said, "Oh? You got a pair of hands I can borrow?"

Then the manager came and said, "Ma'am, I'm sorry but you can't use your feet."

My family looked at him and then looked at each other. No one said a word. Then my father got up and walked out — he knew what was going to happen. Still without a sound, we took all the food and piled it right in the middle of the table, and then walked out without paying a cent. We did it and we would do it again. No apologies.

When I was in school there was no special education program. I graduated from high school in 1962. I attended classes with other students. I was the only student on that campus that had an obvious physical handicap. My sister, though, had her heart on the wrong side, and there was a young man who had leukemia. But who was the only one not covered by school insurance? Right — me. I do not know if you are aware of the problems that we have with no insurance. We are considered a high risk. Please, we need your help for that to stop.

I wish this was a workshop for handicapped students. Do you know why? You know by law this is something you have to do and you are almost forced to accept it. The first law that was ever passed regarding handicapped people was in 1801, and look how far we have come. Not really very far because I still have to push extra hard on the doors. I still have to reach too high to hang my clothes in closets. I still have to ask for assistance. A lot of handicapped students still have to force, push, and pull to get into vocational departments. The mechanics teacher for example, is concerned because this young girl wants to learn how to weld and she is blind in one eye and he is afraid that if she goes to the welding class something might fly up and hit the other eye. He is concerned about her eyes, but is he concerned about the students who have two good eyes, who could lose both of them? Have you ever thought about that?

Do you think you will have problems with handicapped students in vocational programs? Remember that "F" student who did not have a handicap? And that clown who was constantly clowning in class, throwing gum, pulling pig tails, doing no homework, causing a lot of problems? Now are these handicapped students or are these handicapped students? I say the handicap is in the mind of the beholder. They tell me beauty is. I think I am one of the most fantastically beautiful women in the whole wide world. If you do not feel like you are one of the most fantastic people, then you have got a problem.

There are so many things I could tell you. I can tell you it was hard holding down a job. My first job was typing for 27 men — all of them with Ph.D.s and all constantly writing books and editorials and articles. Have you ever tried to read the writing of

a scientist? And they say doctors write poorly!

Then I moved from there to the personnel department working as an Employee Development Specialist, where I became responsible for over 65 students in the vocational education department. Presently I have 32 handicapped students working in the CETA program and these students are working in the printing room, the mail room, and in our office supply room where they deliver supplies. They are repairing chairs, and working in our telecommunications area with our computers. These are young people who quit school and we are taking time to train them. We have over 250 handicapped employees on-site and they do not even like you to talk about their disabilities or their non-abilities.

I hate the word handicap and I hate the word disability. So I just say I am. And I am because I am, and because I am therefore I can. If you think like that for your students — that you are because you are here and you can if you want to — then your programs will be successful.

I think vocational schools need to be aware of what the employment market is really like and not have a program just because that is the good thing to do or because the equipment looks so tempting. I think you need to know where the employment areas are and I think this is where you need to direct students. There is something else that needs to be done with handicapped students and that is personal counseling. Their parents need it too.

Audience: What do you think about mainstreaming today? How does it affect the person who goes into the program? And how does it work versus the separate classroom of just handicapped students?

Price: Handicapped students some years ago were in the regular classroom if they were just physically handicapped. Only those students who had a mental problem were supposed to be separated. It finally got to where we were getting so much money from grants in the school system for handicapped students that we started putting students who were physically handicapped into special education departments and these students did not need to be there. I think mainstreaming is a fantastic thing. It worked miracles for me. I would not be where I am today and I would not be able to stand here and talk to you like I am and I would not be able to tell you my personal experience, if I had been put into a separate classroom. I think we should begin mainstreaming earlier and earlier.

I think it is hard on those students who have been in special education for the past six or seven years and now are being mainstreamed. Those are the ones who are having a hard time. But let me tell you this. Students respond to the way teachers respond. If before I come into your classroom, you say, "Students, we have got this handicapped lady coming in and I want you to not look so obvious, because she is going to be one of our students," then you have already set the trend and the attitude for those students. If those students had the opportunity to accept or reject handicapped students themselves, it would be better. That is for them to do because that is where acceptance will come.

Any other questions? I do believe my time is up; thank you for your attention.

SECTION 504: A COMMITMENT TO EQUAL OPPORTUNITY FOR HANDICAPPED PEOPLE

RALPH ROUSE

Ralph Rouse provides an overview of HEW's Section 504 regulations, including what is required of post-secondary educational institutions to assure they provide equal educational opportunities to qualified handicapped applicants, students, and employees. The presentation also includes a brief description of the function of the Regional 504 Technical Assistance Staff, for which Rouse is Director. Mr. Rouse, a native of Arkansas, has a background in rehabilitation services and counseling.

I think it would be appropriate to give you an idea of what our unit is all about. Nine months ago, we formed a unit in HEW whose primary responsibility is to try to provide recipients of HEW federal funds with technical assistance in helping them understand their obligations under Section 504 of the Rehabilitation Act. The purpose of our office is to be a non-threatening entity available on the request of colleges or universities to talk about their compliance problems, and then to help solve these problems by giving them ideas on how to best come into compliance in the various areas required in regulations. We are a separate unit from the Office for Civil Rights (OCR) in HEW. The OCR has the responsibility for investigating complaints, doing the compliance reviews, making sure that institutions that receive federal funds are making efforts to comply, and in that way enforcing the 504 regulations. Our office is just the other side of the coin. We try to provide them with assistance in a non-threatening way. If you wash your dirty laundry in front of us, you do not have to worry about a compliance review or complaint.

For those of you who are not completely familiar with

Section 504 or the Rehabilitation Act, Section 504 is a law that was passed in 1973, best known as the Civil Rights Act for Disabled People. It requires colleges and universities, public school systems, social services, and other agencies that receive funds from HEW to come into compliance with the regulations and requirements which provide equal opportunity for access to programs and jobs within these institutions. All recipients of federal funds are now required to comply with Section 504, but HEW is the leading federal agency, and it was the first agency to publish regulations. There are 29 other agencies in various stages of publishing Section 504 regulations. As those regulations are published, they will impact from city to county government right on through the various recipients of federal funds.

I am going to concentrate primarily on HEW regulations. The first three subparts of the regulation that I will overview apply directly to secondary as well as post-secondary. The final part will be related to post-secondary, but the essence of it (although it is not geared specifically to secondary schools) will also be compliance requirements for secondary schools.

I would like to give you a historical overview of how Section 504 came about, what the thinking behind it was, and why there was a need for it. The initial attempt to protect the civil rights of handicapped persons was made by a gentleman by the name of Charles Vannick, a Representative from Ohio, and others, through the inclusion of principals of Section 504 as a set of amendments to Title VI of the Civil Rights Act of 1964. On December 9, 1971, Representative Vannick introduced a bill that was designed to provide equal treatment to handicapped persons in all programs receiving federal assistance. In introducing his bill, Congressman Vannick remarked that the treatment and regard for handicapped citizens is one of America's shameful oversights. "Today the handicapped are generally a hidden population. Only the most daring and brave will risk the dangers and suffer the humiliations they encounter when they try to lead normal and productive lives. The time has come when we can no longer tolerate the invisibility of the handicapped in America."

On January 29, 1972 Senators Humphrey and Percy introduced a bill that was identical to the bill introduced in the House by Congressman Vannick. The Congress decided not to amend the Civil Rights Act to include this proposal. Instead Congress included in the Rehabilitation Act of 1972 language which carried the intent of the original bill. The Rehabilitation Act of 1972 was enacted by Congress, but President Nixon chose to veto this legislation for reasons unrelated to Section 504. The Bill was again enacted by Congress, again vetoed later in 1973. Congress then drafted and passed the present act, which was a compromise with the administration, scaling down authorizations for rehabilitation agencies. President Nixon signed this bill on September 29, 1973. Passage of Section 504 was both a beginning and an end to a long and difficult struggle. It was an end of a struggle to get legislation enacted and it was a beginning of a struggle to get it implemented.

The purpose of Section 504 was to provide an equal opportunity to qualified handicapped persons. But why was Section 504 needed? In the past, all too often there had been no way for handicapped persons to reach their goals. Handicapped persons need equal opportunities and that is what Section 504 is all about. It is a bridge designed to insure equal opportunities to all qualified handicapped persons. That has not always been the case in our history. Discrimination has affected all classes of handicapped persons in every aspect of their lives, including schools, jobs, transportation, housing, recreation, and delivery of health, welfare, and social services. Until Section 504, most legislation restricted involvement of handicapped persons. In some states, handicapped persons could not get drivers licenses or fishing licenses. They were often not allowed to marry. As recently as the 1950's, sterilization of epileptics was required by law in a number of states. Handicapped people did not have the right to vote or to hold public office. Many restrictions occurred in transportation. Blind persons sitting next to persons of the opposite sex was restricted. Finally, there was even legislation that prohibited persons considered to be unsightly to be seen on public ways or thoroughfares. That was the breadth of discrimination in our country before this law.

Passage of Section 504 was just a beginning; the legislation is only 34 words long. Implementation was needed to establish Congressional intent, and to implement legislation, of course, requires legislation. HEW and 29 other agencies were required to draft regulations. On April 28, 1976, President Ford issued Executive Order 11914, which directed the Secretary of HEW to coordinate the efforts of all agencies. HEW is responsible for coordinating the efforts of other federal agencies in drafting their regulations, approving them, and making sure that their regulations more or less comply with HEW's regulations so there is no variance among regulations affecting recipients of federal funds.

But let's focus on HEW's regulations. The process of developing regulations, as you know, is difficult and often slow. In the case of the 504 regulations, all of the implementations had to be considered, as well as the cost of the proposed regulations. The process had to involve representation of all interested parties, the agency had to analyze all comments from the field regarding the proposed regulations, and finally, the needs and wishes of a large number of interest groups had to be considered. We cannot forget that Section 504 was passed by Congress with no debate and no legislative directive. Therefore, HEW's job was extremely difficult. As I said earlier, the Rehabilitation Act of 1973 was passed and signed into law on September 26, 1973. Four years later, on April 28, 1977, Secretary Califano of HEW signed the first regulations to become effective on June 3, 1977. That is the effective date of HEW's 504 regulations. But even the regulations were only a beginning. It now requires patience and creativity on the part of consumers, advocates, educators, deliverers of services, and those in charge and responsible for implementing the law. Most important, it requires commitment from all for 504 to become the guarantee of civil rights for qualified handicapped persons that Congress intended.

It is important for you to understand that Section 504 is a civil rights law, rather than a program initiative. Qualified handicapped persons must be offered an equal opportunity to participate in a program if that program is going to be allowed to operate with federal funds. Insufficient funds is not a sufficient excuse for not complying with Section 504. Section 504 mandates nondiscrimination, not affirmative action. That is another important point. It is a non-discrimination law; it is not an affirmative action law. Therefore you do not have such requirements as goals, time-tables, and reports that are tied to affirmative action laws. For example, you do not have to say you are going to serve or employ X number of handicapped persons during the year. All you have to do is ensure that your programs are such that if handicapped applicants care to attend, they can do so without any discrimination being involved.

In some circumstances, special efforts are necessary to insure that equally effective opportunities are made available for disabled people, because identical treatment can be discriminatory. Let me give you an example. For a mobility-impaired person, a person in a wheelchair like myself, if you have a vocational school in which the facilities make it necessary to go up a flight of stairs, there is no accessible entrance to that vocational school. Some might allege that you were offering me an equal oppotunity because everyone who attended that program had to go up those steps to attend those programs.

That might sound ridiculous, but those kinds of arguments have been raised before. To provide an equal opportunity to a handicapped person, you have to make sure that that opportunity is an equally effective opportunity. Effectiveness is very critical to this regulation. In order to make that program effective to me, you would have to eliminate those barriers, those steps that are in front of me. The way you do that is to build a ramp or some other means to make sure that a person in a chair would have access to your facility. Of course, you have other considerations, restrooms and so forth, but we will get into that as we go through the regulations.

Regulations are a detailed set of rules issued by a government agency or department indicating how a law is to be interpreted and outlining procedures for enforcing that law. In other words, they translate Congressional intent into a detailed set of rules and procedures to assist with compliance. The purpose of HEW 504 regulations is to establish rules to prevent discrimination and procedural requirements to make sure that rules will follow. The basic problem the regulations address is that disabled persons are frequently not afforded equal opportunity to participate in programs. Of course, that is the essence of discrimination. To end discrimination, Section 504 requires that all programs be open to disabled persons. We are talking about all operating programs. Section 504 is specifically written to open all programs to disabled persons.

Let's take a look at the structure of HEW's regulation. The HEW regulation has seven subparts. Subpart A lays out the general provisions in the regulations. Subpart B deals with employment practices. Subpart C defines program accessibility. Subpart D lays out the requirements for pre-school, elementary, and secondary educators. Subpart E sets the requirements for post-secondary educators. Subpart F establishes requirements for health, welfare, and social service providers, and Subpart G lays out the enforcement procedures which the OCR utilizes when enforcing the law. Subparts A, B, C, and G apply to all recipients. Subparts D, E, and F apply to certain types of recipients, D for elementary and secondary, E for post-secondary, and F for health, welfare, and social service agencies. The subparts that are applicable to all recipients do not address the specific program characteristics. The subparts that are applicable to specific types of recipients do address the program characteristics in that particular institution.

Let's look at the Subparts A, B, C, and E in some detail. I am not going to cover all the sub-sections, but I will try to cover the most important points in A, B, C, and E. Remember that there are many other important requirements in the regulations and you should read them carefully whenever you are looking at your compliance responsibilities.

Subpart A is the general provisions in the regulation. This subpart does three things: it defines key terms, it identifies discriminatory policies, and it establishes procedural requirements. Those three things are primarily what it does. It is the base of the regulation. You have to understand it to know what the others are talking about.

Let's begin with some key definitions in the regulation that are very important for understanding the working of the regulation. First of all, "recipient." You will read this word throughout the regulations. It may refer to a college or a university, a vocational school, or a secondary school. Practically speaking, if any federal money, property, or manpower is involved, you have recipients for services under Section 504. If you can tie federal money to that program, you have a recipient. Exceptions to that rule are contracts of procurement; if you make pencils for the government, then you are not covered by 504. You are by 503, but not 504. Also, contracts of insurance and guarantee are not covered. For your purposes, as educational institutions, you are the recipient.

The definition of "facility" is a very broad definition. Most folks think of a facility as being the actual building, but in the regulation that is not entirely so. It is the building, but other structures, walks, parking lots, and equipment are included in the definition of facility.

The definition of a "handicapped person" really has three parts. The first part is a person with a physical or mental impairment that substantially limits a major life activity, such as working, walking, and so forth. Some of the categories covered under this first definition are deafness, blindness, mobility impairments, developmental disabilities, mental retardation, epilepsy, cerebral palsy, mental illness. The Attorney General of the U.S. gave a ruling to HEW when they were writing these regulations that drug addicts and alcoholics must also be included if they are being discriminated against.

The second part of the definition has to do with a person who has a record of such an impairment, whether in fact they are impaired or not. Let's say we are talking about a young person in a secondary school setting, who has been classified as mentally retarded incorrectly. Suppose they have evaluated that person, classified him as mentally retarded, but he is not really mentally retarded. If discrimination occurs as a result of that classification, that person is covered under the regulation. Another example is a person who applies for a job and has a history of a heart condition. He may recover from that heart condition, but still have that history on his record. If he is discriminated against because of that record, he is covered under this regulation.

The third part of the definition is the person who is regarded as being disabled. As the three parts are described, they become progressively more difficult to prove. It is a lot easier to prove that you are in a wheelchair than that you are regarded as being in a wheelchair. Some of the people covered under this particular aspect of the regulation are persons with disfiguring scars who are not disabled but who are actually discriminated against because they are considered unsightly.

The regulation prohibits discrimination against *qualified* handicapped people, and qualified is a key word. Just because you are handicapped does not mean that you are qualified to participate in the program or that you are qualified to be an employee. It is very important for you to understand that not everybody is covered that is disabled, only qualified handicapped people are covered. This is an opportunity to apply common sense to the regulation because of the definition of who is qualified. For example, in the area of employment, a qualified handicapped person is a person who can perform the essential functions of the job with a reasonable accommodation. This screens out people who are just absolutely unqualified. Employers must lay out very specific functions for that job in the job description. The burden is on that employer to prove that a person does not qualify; it is not upon the individual to prove that he is qualified.

An effort was made in the general provisions Subpart A of the regulations to say what kinds of actions are discriminatory. There are several ways to discriminate. Remember that the regulation is concerned with acts and policies that have the effect of discrimination. It makes no difference whether you intend to discriminate or not; if the ultimate effect is discriminatory, you are out of compliance with the regulation. Many policies have a discriminatory effect, but few policies are represented as discriminatory policies. Denying handicapped persons either directly or indirectly the opportunity to participate in a program is prohibited. Gross denial for access to a program is prohibited; providing an opportunity that is not equal is prohibited; providing a disabled person a benefit that is not effective is prohibited; providing unnecessarily different or

separate services is prohibited; and finally, aiding other organizations that discriminate is prohibited. Note that the regulations say that you cannot deal with someone else who discriminates.

To move toward compliance and to assist in stopping discrimination, several procedural requirements are set up in Subpart A of the regulations. These are the nuts and bolts that you have to accomplish. The first requirement is an assurance form to be filed with HEW. HEW Assurance Form 641 is like a contract; it reminds you that there are obligations that go along with the federal financial assistance.

The second requirement, and probably the single most important procedural requirement in the regulations, is the self-evaluation. Recipients are required to conduct a self-evaluation of all their policies, practices, and procedures. This was supposed to have been accomplished by June 3, 1978; if any of your institutions have not done that, you should be concerned because it is past due. The goal is simple in this process. It is to identify and correct problems, to identify discrimination and to eliminate it. The key in the self-evaluation process, the first of its kind in the history of civil rights law, is a requirement to actually involve the protected parties in the solution of the discrimination practice. The HEW regulation requires that when you do a self-evaluation, you consult with disabled persons or with organizations that represent or understand their needs. You do not do the self-evaluation as an entity unto yourself; you involve disabled people in that process.

If you have 15 or more employees, whether they are part-time or full-time, there are three other procedural requirements to follow. Designation of a responsible employee, better known as a 504 coordinator, for your institution is first. The goal, again, is simple. It is to identify someone who will be held accountable for making sure the compliance efforts are made. The next requirement is adoption of a grievance procedure. This requirement provides persons who feel that they have been wronged a structured way of seeking redress. You have to establish a grievance procedure which incorporates due process procedures, time frames, and an independent body to hear complaints and try to resolve them. In terms of the grievance procedure process, two types of individuals do not have to be afforded a grievance procedure. One is an applicant for employment. If a person applies for employment and is not selected, you do not have to provide a grievance procedure for that person (though it would be good if you did). You do for employees. Also, applicants for admission to post-secondary educational institutions, including vocational schools, colleges, and universities, do not have to have a grievance procedure provided to them. However, students do; the ones that are already admitted. Those are the only two exceptions to a grievance procedure. All children eligible by age for entrance into a secondary school that are qualified handicapped individuals must have a grievance procedure available to them. Of course, I am sure you are also familiar with the Public Law 94-142 requirements which are meshed with this and are essentially the same.

The third requirement, if you have 15 or more employees, is a notice requirement. It is the requirement to notify the public that the recipient does not discriminate. This serves several purposes: it lets the disabled person know that jobs and services may be available, it establishes the policy for which persons can be held accountable, and it ensures that special efforts will be made to notify individuals who typically have trouble with written or audio material. If you have brochures or publications, any kind of information that you provide to the applicants for admission to your institution or applicants for employment, must include statements regarding your non-discrimination against disabled people. You also need to notify through posting on bulletin boards these kinds of things and also notify individuals that you have a grievance procedure available to them. Remember that the general provisions do three things: they define key terms, they state in general terms what actions are prohibited, and they establish procedures to follow in order to comply.

Perhaps no other single part of the regulation is so important as Subpart B — Employment. The unemployment rate among disabled persons is very high, possibly as much as 60%. One of the major reasons for this extraordinary fact is that employers discriminate in their employment practices. Section 504 prohibits discrimination in employment practices and requires that employers make reasonable accommodations in order to successfully employ disabled persons. So the question you want to ask is, "What is a qualified handicapped person for the purposes of employment?"

A qualified handicapped person is a person who can perform the essential functions of the job with a reasonable accommodation. There are two key terms in that: essential functions of the job and reasonable accommodation. Essential functions are those that constitute the basic functions of the job. This is where very carefully written job descriptions become so important because the employer is responsible for proving that a disabled person is not qualified when applying. If you have a particular job for which a disabled person applies who has the necessary educational requirements, it is very important that you have the essential requirements and functions of the job laid out in a job description. Then you may ask that person, "Can you lift 50 pounds? Can you do what is required in order to be successful in this job?" If that person cannot perform those essential functions with a reasonable accommodation, then he or she is no more qualified than any other person. What this regulation tries to do is establish some fairness to disabled people. It does not make you hire people who are unqualified.

What is a reasonable accommodation? It is difficult to define because you have to look at the individual person in order to determine what kind of an accommodation may be needed for that person to successfully perform the essential functions of a particular job. Those tasks that are incidental or non-essential, nobody, neither the disabled person or the non-disabled person, has to perform in order to be eligible for that job. The essential functions are the keys. Reasonable accommodation provides assistance to compensate for non-critical limitations, such as making facilities accessible. If I apply for a teaching job and I need a ramp to get into the institution in order to teach, a reasonable accommodation would be for you to provide that ramp so I can get in. Another reasonable accommodation would be to modify a restroom facility so I can use it (since we folks in chairs do that too). Some of the other reasonable accommodations are such things as job restructuring, modifying work schedules, acquiring or modifying equipment or devices, providing readers for blind people or interpreters for deaf people, and other similar actions. If you as an employer can prove that providing that accommodation would create an undue hardship on you, in other words, that it would be so expensive you would go broke if you provided the required accommodation for that person to be successfully employed, and if you can document that and be prepared to prove it, then that is justification for not employing the person. Keep in mind it has to be documented and it has to be defined very narrowly. You cannot just say it is going to be a hardship so you will not employ that person. Also, if disabled persons can perform that job without reasonable accommodation after finding out it is going to put an undue hardship on you, or if they can provide that accommodation themselves, then you still have to consider them for employment.

What kinds of things are prohibited under the employment section of the regulation? A long list includes such things as

hiring, promotion, transfer, rate of pay, job assignment, leave, fringe benefits, training, and so on. It is a rather comprehensive list. The basic requirement is that you cannot treat non-disabled persons one way and disabled persons another if that different treatment results in reduced opportunity. Tests and employment criteria must measure abilities that are job related. If you have an employment application test, it has to measure things that are related. If it does not, it cannot be used. It may be possible for an applicant to perform the job either with or without a reasonable accommodation but it may be impossible for that person to complete the test because the test is the barrier, as opposed to the job.

An employer must make a bonafide offer of employment before inquiries can be made about a disabling condition. You cannot ask a person on the employment application or in the employment interview if they are disabled. But you can ask them if they can perform the essential functions of that job as laid out in your job description. You could not say to me, "Are you in a wheelchair?" But you could ask, if the job required lifting 50 pounds, "Can you lift 50 pounds?" If my answer was no, I would not be meeting one of the essential functions of that job.

Audience: What would happen if you had two applicants, one disabled and one non-disabled, with equal qualifications? Does the employer have a prerogative in making a choice?

Rouse: Yes, as I said earlier, Section 504 is not an affirmative action program, so it would not require hiring a person who was equal or a little worse than the non-disabled person to meet affirmative action goals. It does say, however, that you have to give that person an equal opportunity. If you have two people whose qualifications are identical, then it would be your right as an administrator to select the person that you felt would best function within your institution. If you made that decision because your institution was inaccessible, then you would have automatically discriminated against that person because you were considering something other than that person's ability to perform the essential functions of the job.

Audience: What about work history and work experience? The disabled in many cases have a decisive disadvantage in this point. Is that addressed?

Rouse: Not in the Section 504 regulation per se. There is only a moral obligation that is not part of the regulation for people to consider that this person might have had much more experience if they had not been disabled and had not been denied access to various services.

Audience: Would the employer be in violation of the regulation if he were to say to the disabled person, "I cannot hire you because I am going to hire somebody with more work experience"?

Rouse: It would depend on the circumstances of the situation. It could be a violation if that person were denied an opportunity because of past discrimination. But if that person was simply fresh out of college and had less experience than a person who had five years of work experience, then, no, it would not be.

Subpart C of the regulation is what is termed the central requirement in the regulation, accessibility. This is perhaps the least understood part of the regulation. What does Subpart C require? It requires that all programs, not just all facilities, be accessible to and usable by disabled persons. How is this done? Logically, the discussion of how to do this has to deal with two types of facilities: existing facilities and new facilities. We have to deal with facilities because we are talking about accessibility of programs that go on in those facilities. Remember that broad definition of facility includes outlying areas as well as the structure itself.

First of all, let's deal with new facilities. To build a new building to conform to a design standard like the American National Standard Institute, which provides specifications for making buildings and facilities accessible to and usable by physically handicapped persons, costs very little if anything extra. Studies show that, at the most, it costs one half of one percent more if you start from the ground and construct an accessible facility as opposed to an inaccessible facility. Because of that, the regulation requires that all new buildings (and a new building is defined as a building where the ground breaking occurred after June 3, 1977, the effective date of HEW's regulation) be built to conform with the ANSI standard or one that provides an equivalent level of access. The goal for this requirement is to make an increasing number of facilities accessible and avoid expensive alterations later. Naturally, any program that is housed in a new building should be accessible. Another requirement comes into play if you have a building built with federal construction funds. The Architecture and Transportation Barriers Compliance Board, a federal agency, was established under Section 502 of the Rehabilitation Act and has responsibility for investigating and issuing compliance orders for buildings subject to the Architectural Barriers Act of 1968. Buildings covered by the act include those constructed by and for the federal government, as well as some buildings constructed after August 12, 1968, which were financed in part or whole by a construction grant or loan from the federal government. You may have such a building in your facilities. If the building is subject to the Architectural Barriers Act, it should be built to conform with the design standards of those specified in the legislation authorizing that grant or loan. Most of the standards in that area are similar to the ANSI standard, so the ANSI standard would be your guide. The agency providing the funds or the Architectural and Transportation Barriers Compliance Board can require that you correct any deviations from the required design standards. If there are any deviations from the standards in these buildings, you may be in violation of the Architectural Barriers Act of 1968. You should consider correcting these differences as part of your plan to achieve overall program accessibility.

The most confusing part of the regulation, the one that is the biggest problem to people, is existing facilities. In those already in existence before June 3, 1977, altering to make them conform with an ANSI standard would be both fiscally and physically difficult, and it is not required by the regulation. Yet the regulation demands access to the programs that go on in those facilities and in those buildings. So what can you do? You are required to make your programs accessible, but you are not required to make all of your facilities accessible. Programs can be moved from an inaccessible building or facility to an accessible facility; programs can be made accessible by redesigning equipment; and programs can be made accessible by making physical changes, actually doing some construction work. In a post-secondary setting, or in an elementary setting, you would have to insure that all required courses, not every unit of that required course, but all required courses and a reasonable number of elective courses (at least one unit of each or more if necessary, depending on the number of disabled people in the institution) are accessible to disabled people. If you have all of your biology classes on the second floor, and all your math classes on the first floor, you might consider shifting them around so you have a few math classes on the second and a few biology classes on the first. Disabled people then would have access at a level that is acceptable. Also, if that first floor is not accessible, it might be wise to modify it because making it accessible would be much less expensive than putting in an elevator. The guiding principle to existing facilities is this: structural changes need not be made when other methods are

effective. If structural changes are made, the design standard for those changes should be ANSI or a standard which clearly permits equivalent access.

If structural changes are necessary in existing facilities, another procedural requirement comes into play. This is probably the second most important procedural requirement in the regulation. It requires that a transition plan be developed with the assistance of disabled persons or with organizations that represent disabled persons and their interests. This transition plan identifies the physical obstacles in the recipient's facilities; describes in detail the methods to be followed to make those facilities accessible; specifies a schedule for achieving a full program accessibility; and finally, indicates the person responsible for seeing that that is accomplished. Here again, it is most important to involve knowledgeable disabled persons in this process because disabled people have spent their lives trying to figure out how to get into facilities in the least expensive manner. They can tell you a lot of little ways to cut corners and save money on making facilities accessible.

One of the most effective ways to accomplish your responsibilities under Section 504 is to form a 504 Compliance Committee composed of staff in key positions with knowledge and experience in the areas to be examined during the self-evaluation process. Such people are those responsible for the physical plant, for personnel, for finance, for the institutional programs, and for general administration of the programs. The committee should include a representative mix of disabled persons, and by representative mix I mean people who are deaf, people who are blind, people who are mobility impaired, people who understand the needs of people who are mentally retarded. Put these people on a 504 Compliance Committee so the committee can systematically address the procedural requirements in the regulation. Our office, the regional 504 Technical Assistance Office, has been established for this purpose, so whenever you need assistance with this, call us and we will be glad to help you.

Recently there have been vocational education program guidelines issued. On March 21, 1979, the Department of HEW published rules and regulations in the Federal Register entitled "Vocational Education Program Guidelines for Eliminating Discrimination and Denial of Service on the Basis of Race, Color, National Origin, Sex, and Handicap." It requires any state agency that receives and distributes funds to a vocational institution, whether it be secondary or post-secondary, to do certain things. The thing that will impact on you the most is that they will be conducting periodic compliance reviews of selected subrecipients. A subrecipient is an institution such as a secondary, vocational education institution or post-secondary institution. They will be investigating the subrecipient to determine whether it practices unlawful discrimination in any aspect of its program. Upon finding unlawful discrimination, it will notify that subrecipient of the steps it must take to attain voluntary compliance. Methods of administration have been issued which will require that the state agencies must provide an agency-level desk audit review of at least 20% of all subrecipients each year. That means that at least 20% of your group will be reviewed in the coming year. Each subrecipient, whether a secondary or post-secondary vocational school, will be the subject of an agency-level review every five years except where a subrecipient is already the subject of legal proceedings by the Office of Civil Rights because of discrimination. You see how important it is to make sure that your institutions make some genuine efforts to comply? You may not be there yet, but you certainly ought to be working on it. I hope that my presentation explains the basics of the 504 regulations. If you have questions or concerns, contact me at my agency in Dallas.

OFFICE OF CIVIL RIGHTS GUIDELINES FOR VOCATIONAL EDUCATION

BILL EDDY

The recent OCR Guidelines will have far-reaching effect for handicapped students in vocational programs. Mr. Eddy presents the implications of these guidelines for vocational education and more specifically for local administrators. He covers counseling practices, admission into regular vocational programs, provision of supplemental aids and services, and work-study and apprenticeship programs.

I am going to talk about major issues affecting persons who are handicapped in vocational education and give you some of the issues that will be looked at by your state department of vocational education. I am presently conducting compliance reviews in vocational education that will be sent to the state directors of vocational education and to anyone else who applies for them.

In 1973, NAACP, the National Organization of Women, and other groups sued the Secretary of HEW because of the denial of access on the basis of race, sex, and national origin. Later, handicapped groups joined in. The judge issued the order in 1977 which basically said that the Office of Civil Rights (OCR) had to start forcing the civil rights provisions in vocational education and that vocational education had to start monitoring its own program. That caused the issuance of guidelines. The guidelines are to be used with Section 504, or with Title IX. They do not stand alone. Who do these guidelines apply to? They apply to local school districts, community colleges, secondary, post-secondary programs, and private institutions that provide vocational education under contract to

a subrecipient. In schools it also applies to junior high schools, middle schools and industrial arts programs.

We are finding that in industrial arts programs certain handicapped youngsters are being provided with absolutely no services or support. One of my colleagues had forty students in his building trades class, including disadvantaged students, a couple of students from Cambodia, and handicapped youngsters. Yet he had no outside help, no support. With that kind of class he just could not do his job. He met with his director and they cut his class in half and got him some support by calling the state education agency. It was that quick. It took us about two weeks to get the money arrangement worked out. Those of us who are in special education or vocational education have to fight for that profession. We are under fire right now.

The OCR Guidelines are divided into different sections. Section I is an introduction, Section II deals with the states' responsibility. I am not going to go over Section I, but I will be covering Section II because the vocational education directors at the state level will be coming up looking at your programs.

Section III deals with money and how money is used to provide or deny access to programs. The problem with finding money flows is that the formulas in some cases do not relate to certain groups. The District of Columbia, for example, could write an application, the application could be received and the money be spent. But for this to happen the application has got to include protected groups (in other words, handicapped people, minorities, women and limited English speaking ability students). The application should include as a general component the provision of services for the handicapped. Handicapped youngsters placed in separate programs must be only those youngsters that cannot be maintained in the regular program with support.

Section IV deals with access to vocational education programs. I am not going to read the guidelines to you. Instead, I am going to cover some of the issues. First, how do you analyze civil rights issues? Second, how do you conduct compliance reviews? I have seen some as short as ten pages, some as long as 75. Third, how do you collect and analyze civil rights issues? Fourth, how do you make determination of civil rights violations? Fifth, how do you formulate possible remedies from subrecipients? The state should tell us how they are going to work with subrecipients to correct deficiences in what they have found. Sixth, how do you implement enforcement action? That is when they go out in the district and find all the handicapped youngsters in the back programs. Seventh, how do you go to target subrecipients?

The states have been given the responsibility to do a lot of the things that they should have been doing since 1964. The civil rights provisions have always been there, but we have never enforced them. The section on access to vocational education programs addresses the aspects of the recipients' policies and practices that bar or suppress applications for admission to a vocational program. Access is effectively denied to certain groups on the basis of race, sex, national origin, or handicap when students do not hear that services are being provided. In a statement of notification to the public, in newsletters or publications, you must tell the public you can provide help. One of the reasons handicapped people do not apply to the special education teachers is because they think nothing is going to happen. So you have got to tell people that they are going to get some help. Access may also be effectively denied by course prerequisites that are not universally available to certain groups.

What are some of the major issues when it comes to access or admission? First of all, I am going to talk about site selections. Site selections may not be accessible to the handicapped people. Changes in physical plant is another issue in access. You cannot renovate a facility to perpetuate discrimination. That means if you develop a new wing, you have to change it in such a manner that it provides access to handicapped people and does not maintain segregated programs. Handicapped students have been put upstairs in the attic or back by the vent blower or down in the boiler room. In one program, the students had to climb through a window on a ladder to get into the building.

Audience: I have got a homemaking department. For ten years they have never put in a boy's room. Is that a violation?

Eddy: If they are providing something for women, they should provide it for men. In the same way, if they have changing rooms for boys in a shop class, they should have something comparable for women.

Audience: Is it legitimate to be carrying a student up and down stairs?

Eddy: According to policy, carrying students is not allowed. That was a temporary thing that you could do for so many days, but in that period of time you had to start making changes.

Dual centers, annexes, or branches are common problems for disadvantaged programs and for handicapped programs. The issue is whether a branch or annex is attended exclusively or predominantly by handicapped students or students of one race, sex, or nationality. If it is a comparable program, can you justify that annex through educational concerns? In other words, you may have a special program for the severe and profoundly retarded, or a special program for mobility impaired youngsters that may be educationally justifiable, but you must look at the least restrictive environment provision by 94-142 and 504 by which vocational education is bound. It is an educational decision. If it is not the least restrictive environment, those students should be located within the school, a place which does not draw attention to itself. In the attic, or the basement, or out in the barn, or off in the field in a quonset hut definitely draws attention to itself. You also need comparable facilities. When you have a quonset hut that is not air-conditioned versus the other classes in a nice setting, those are not comparable facilities.

Equal access for handicapped students also deals with architectural and equipment barriers that deny access to vocational education programs. We are not only talking about equipment and architectural barriers, we are talking about supplementary aids and services, curriculum accommodations, and those kinds of things. If there are not support services being provided to those youngsters, that can be a basis for denial.

The Guidelines have five basic provisions. If necessary, you must (1) modify instructional equipment, (2) modify or adapt the manner in which courses are offered, (3) house the program in facilities that are readily accessible to mobility impaired students or offer them facilities that will make them readily accessible, (4) provide auxiliary aids that effectively make lectures and necessary materials available to handicapped students, and (5) provide related aids and services that assure students an appropriate education. What does all this mean? That in your IEP process you must identify the services for those youngsters. Is there a curriculum accommodation? Are they using curriculum to help provide access?

Another issue is whether the lack of related aids and services effectively denies access to handicapped students. For example, in some programs they write an application for funds for a vocational school. The application for funds targets a population, but only provides support services in this program. They do not provide services in the regular program or they provide them only in a limited number of programs. In other words, you need to look at how aids and services are provided across all the programs and activities.

Academic prerequisites for a particular program of instruction have effectively denied access to programs for handicapped persons. Students are often denied access to those prerequisite courses on the basis of sex, race, national origin, or handicap, and that presents another problem. You will find patterns of placement that are weird. There is nothing based on interest — it is based on things that cannot really be justified. That is one of the tough areas. The thing we look for is patterns.

You need comparable facilities, too. You may satisfy one requirement by providing changing rooms for females, but still not have the program accessible to handicapped females. In one instance, the district had spent a lot of money on bathrooms for females but handicapped students could not get into them. They had three girls who would have used them, but they could not.

As part of the beginning of the school year, the recipient must advise students, parents, employers, and the general public through general circulation, media, and other medium of the provisions of non-discrimination. They will be looking, at the state level, for newspapers, articles, books and reviews. If you are dealing with handicapped issues, you have a provision for notification that is very strong. If you have a handicapped student who does not speak English and whose parents do not speak English, you have to provide information to that parent in the native language. You cannot fulfill the notification requirement for somebody who does not speak the language.

The next section we are going to deal with concerns admission to vocational programs and admission quotas. For handicapped youngsters it is based on the IEP. If the IEP includes something, you have got to do it. If you have 100 applications for 20 slots, all persons must bear that burden equally. In other words, you spread the applications out to make sure that all persons have an equal chance at it. Proportionally they have to equal out as best they can. Guidance counselors will have to make some hard decisions.

Whatever system you develop cannot have an adverse effect on protected groups. You can throw darts at the moon, but you cannot rip off minority students, handicapped or women. I do not care how you do it, but you cannot do them in. Now how would I deal with that if I was running a program? There is something called dollars and something called an annual plan and if I do a proper annual plan, I would do a needs assessment based on who is coming in. I will talk to the vocational education director. I will talk to the special education director to find out how many students will be coming in.

As long as the annual plans are written without reflecting the needs of the group you are going to have a problem. If you need more dollars, you have the capability to get them, within limitations. But the actual money problem that we have found is in the application process. Training is denied protected groups. That is the major problem in the whole funding issue. It is not in the formulas. The formulas have no relationship, in some cases, to what is going on. The application process, guidelines on how to design systems, is where the problem is.

How does the criteria of admissions have an adverse effect on handicapped persons? Does the admission criteria — past grades, disciplinary infractions, tests, recommendations, course-work prerequisite to testing — have the effect of disproportionately excluding protected group students? If so, can the recipient demonstrate whether such criteria have been validated as essential for participation? What does all that mean? The main thing is that you establish criteria. You have got to validate that criteria — if it is having an adverse effect, if you are establishing criteria, reading levels, grade point — before you implement it.

Audience: If you have handicapped students who are getting ready to go into a work program where they are going to be out on a job, you want them to have a certain level of competence in social skills before you put them on the job market. Is that valid criteria?

Eddy: Of course it is.

Audience: Is it equal to have that kind of criteria?

Eddy: Johnny is an emotionally impaired student who needs a little guidance. With help and supplementary services you are doing your best but you cannot figure him out so you call him in. You try everything you can but supplementary aids and services are not working in the regular program. In that case, a separate program is permissable, if you have given it your best show and you have gone through the IEP process. But that should only be for those students who cannot make it in a regular program with support.

Audience: In other words if it happens only one or two times, that is okay, but if you are excluding a lot of students because of this criteria then you have a problem.

Eddy: Exactly. For example, we find that minority students are treated differently in discipline cases. In other words, on the basis of race alone, there is a difference in penalty, such as suspension versus staying after school for a while.

To justify academic requirements for handicapped students, a recipient must demonstrate that a handicapped student cannot benefit from participation in the program of instruction until the prerequisites have been mastered. In the case of a program having no vocational benefits unless a license is earned, the handicapped student cannot be licensed unless the academic prerequisites have been mastered. Benefit from participation can be defined from this purpose as the ability to learn a vocational skill, craft, or trade that will improve the student's prospects for employment or for employment at a higher level of pay or prestige than he or she would have enjoyed without participation in the program. Participation does not mean the ability to complete all course requirements.

When a student is going through this program and leaves but finds that more training is needed, the law provides access back into the program to get what is needed. The problem right now is that once students get locked into a tracked program of vocational development, they cannot get out of it. It is almost impossible. But a student should have options to programs. When you treat individuals as a class of people, we have problems with that.

I would like to look at the counseling practices that channel students into programs. Counseling programs that help identify supplementary services, whether they are active in preventive measures, the materials used, or recruitment activities. There needs to be equal opportunity in the vocational instructional setting as well. What you need to look for is whether you used the supplementary aids and services to provide access. When secondary level handicapped students are placed in programs for the handicapped, would the use of supplementary aids and services in the regular program have permitted them to be mainstreamed? Chances are it would have. If you do not supply supplementary aids and services in the regular program, then you are forced to go to a separate program. Do handicapped students participate with non-handicapped students in the program services, clubs, and so on? We had one case where students could not help with the yearbook, could not be in the class play, could not be in sports; they were excluded from most regular activities.

Are separate facilities and programs comparable to those provided for non-handicapped students? Are special education students limited to work study/work experience programs versus regular vocational programs? That is a violation.

When we look at vocational evaluation, it is the effect of

the evaluation more than anything else that we look at. If the effect is a work study program I am going to question it right away. If girls are coming out only in tradjtional programs, we will get them on Title IX. If students are being restricted to only lower-paying occupations or the handicapped students are in very stereotypical programs, that is going to be questionable. Are evaluative materials administered by trained personnel that know something about vocational education? I have seen vocational evaluators who know absolutely nothing about vocational education. I start looking at how they look at data, how they look at students. In some places they have to change the system so that vocational evaluation provides access instead of denying access or screening students out. So we look at the effect a system has.

Audience: I have heard that unions are now requiring a transcript from students and if a student has been enrolled in a special education program they would be denied entrance into that particular union. They do not state this, but it seems to be happening.

Eddy: Whether it is stated or not, if the union does not take people regardless of gender, national origin, race, or handicap, the school has to sever its relationship. All the people with the unions that I have worked with on the President's Committee on Employment are very vocal about working with the handicapped, but when you get down to the grass roots level, you will not find many workers from the protected groups.

Audience: What good would severance do? It would not hurt the union, it would just hurt the "normal" students that could have gained access to the union.

Eddy: When the union is denied access to your vocational schools that deprives them of something they really do need. I would suggest calling in the Civil Rights Commission. The Civil Rights Commission will deal with the union. They come in and the doors that were closed to women, handicapped, and others, all of a sudden come open.

I support vocational education in a lot of ways. Any student leaving school who has had some skills training first does better in the job market. First, you go for work experience, then for job placement. But if you go from the classroom to a job, the students are not ready for this. They do not have the skills and are not socially ready. The benefit of a good work study program in which a student learns modeling and social skills is also clear. The major thing about work study programs that I want to cover is that you do not want to *limit* students to these programs. You want to leave options open, to be sure that programs are accessible.

FUNDING ISSUES IN VOCATIONAL EDUCATION FOR THE HANDICAPPED

BILL EDDY

Bill Eddy, instructor at George Washington University's vocational special education program, has frequent contact with the nation's lawmakers and policy developers — including such individuals at the Office of Civil Rights. In this session, Mr. Eddy reviews funding issues in light of the civil rights guaranteed to handicapped students, including issues such as the application process, restrictive vs. non-restrictive programming, and ways to evaluate services to the handicapped.

I am going to give a very brief outline of the Office of Civil Rights Guidelines. In 1973, the Secretary of HEW was sued by the National Organization of Women and other groups because of denial of access to vocational education. With the order, the Secretary was required to issue the OCR Guideline and start enforcing Title VI, Title IX, and Section 504 in vocational programs.

These guidelines may be the first, but they are definitely not the last. There is a letter of understanding between the Bureau of Education for the Handicapped and the other primary operative components in HEW that they, too, must start looking at the effect of their programs on protected groups. Vocational education was one of the first in education to be required to do this.

The Section we will talk about this morning is Section III. Who do these guidelines apply to? The OCR Guidelines are to be used by the State Director of Vocational Education and local districts, including community colleges and post-secondary vocational adult programs. It also applies to high school programs, junior high and middle school programs. I include middle school programs because, if you look at patterns of programming, industrial arts and homemaking programs are critical for handicapped persons. If handicapped persons are not exposed to exploration activities or prevocational activities at this level, it will have an adverse effect later when they are in a vocational program.

When you read the OCR Guidelines, you will find a theory of discrimination that will show you how to review policies and procedures. The first term is this: unlawful discrimination. In carrying out your civil rights responsibilities, you will have to make a judgment about unlawful discrimination. When evaluating the state policies and practices, as well as those of the local education agency, two primary theories of discrimination will require interpretation. Understanding these interpretations will assist you in making decisions. The first is called disparate treatment, and is sometimes called intentional discrimination,

different treatment, or unequal treatment. An example would be giving female applicants a certain kind of test before they can get a job, or requiring handicapped students to go through a vocational evaluation system, while not requiring non-handicapped students to do so. This is especially true when this vocational evaluation system has the effect of denying access.

The second term or theory is disproportionate impact, sometimes labeled adverse effect, adverse impact, or disparate impact. This is when all persons are treated the same, but the rule of procedure applies a greater impact to one group than another. The policy might appear neutral, but nevertheless produces discriminatory outcomes. For example, if in recruiting you only recruit in non-minority areas, you are discriminating.

Because Section III deals with money, it is critical to come up with some basic understanding of it. The OCR Guidelines deal with federal funds, state funds, and local funds. How can a federal law apply to local tax dollars? This is a constitutional issue. Constitutionally, any person has a right to local tax dollars, state tax dollars, and federal tax dollars, and you should not deny that right because that person is handicapped or cannot speak English. Some districts in the past have not spent local tax dollars on services for protected groups. Instead, they have relied only on state and federal funds. The basic maintenance of effort for a vocational program should be paid for by everyone. The dollar flow should be the same for a handicapped student as it is for any other student. If you rely on federal or state funds to provide basic maintenance of a program for handicapped students, while you use local tax dollars for other students, then you are discriminating.

We are going to look at this flow of dollars from the state level to the local level. When you are talking about flow of dollars for the handicapped, there are some general problems that you will run across. First of all, the state of Texas designed a formula, similar to other formulas used throughout the country. The basic elements are found in Section III of the Guidelines. The federal dollar formula used by the states includes a reimbursement scale, based on relative concentration of low-income families. Those districts with high concentrations of poverty must have high priority.

Some states use a formula based on current enrollment data. That is how Texas works. The problem with that is your current enrollment need not reflect the type of groups. If the state releases money on average daily attendance, this attendance may include no handicapped persons. Also, in releasing funds to a program like that, the enrollment might reflect the protected groups, but these groups may be placed in restrictive environments; women who are in traditional programs, limited English speaking students trained for low-paying occupational areas; handicapped students placed in programs called vocational, which are in fact non-skilled training. Enrollment data is critical. When a state releases information to local districts, states have to see whether the vocational school actually reflects the protected groups within the community. If the vocational school does not reflect these groups in the community, there is a problem.

When HEW finds that a health program does not reflect a community's protected groups, HEW will withhold funds. For vocational education, the state director of vocational education does not withhold funds when this happens. But within a ninety-day period, these vocational programs must start remedies to correct this situation so that the local education agency does, in fact, begin including enough protected groups within the program. If the Local Education Agency refuses to go along with providing support services for these groups, then OCR hears about it and goes for enforcement. If LEAs cannot come up with remedies, they need to tell us about it.

What are some problems at the state level? The major problem we are finding is that the formula some states use does not hit protected groups, because when the state uses something like full-time enrollment, it is based on current enrollment. It does not reflect the protected groups within the community. If I cannot find money going out to provide services for LESA students in an area where there is a high concentration of non-English speaking people, then I have found an area of automatic concern.

The method of administration can be very difficult. The states have an obligation to look at civil rights enrollment data of LEAs. How are these surveys used? They will be used by the state director of vocational education to conduct compliance reviews for regional offices in Texas or from the state level. You will have 20% review every year, 5% on-site, depending on what is found from the survey. State agencies have to conduct reviews so they will be using it. OCR will be using it as well, to find out the enrollment data for conducting our own reviews. The Bureau of Occupational and Adult Education will be using it to try to plan what has to happen in certain areas.

The method is where the system starts to fall apart, especially with the application process. Even though the formula might look okay — in other words, districts with high populations of protected groups are actually getting money — the districts might not be spending the money as it was intended to be spent. The application process also gives us trouble because the application itself restricts students to certain kinds of programs. For example, one LEA submitted an application for a vocational development program for the handicapped, which was a non-skilled program. The application process itself, therefore, restricts.

The state uses Subpart III funds to train LEAs in writing applications, so if states start training LEAs to start writing applications so as to restrict — in other words only fund work-study programs for handicapped students, or other segregated programs — then again the system falls apart. So the application training process is also important.

Most application guidelines never address the problem of LESA handicapped students. Handicapped students who do not speak English must be provided support services. Section 104.313 of the Vocational Education Act has money available for LESA students. Subpart II, Section 110-A, addresses handicapped students and can provide funds.

The application process is not working because the training program is restrictive, and the programs identified are typically non-skilled training. Therefore, the program is non-comparable, and there is no monitoring. The design is weak and the process and review does not exist. Once a state releases money to LEAs, the states are not really monitoring the funds. We have found a significant number of cases where LEAs get the money for one thing and then spend it on something else.

Audience: We are mandated to spend a certain amount of our funds on special education, and I do not see any problem with that. But let's say I have three special education students in auto mechanics and the only way I can allocate any of my special education funds is to do something above and beyond what I do for my regular students.

Eddy: That is exactly what the law requires.

Audience: Well, let's say that these students do not require anything above regular services. I do not have any VEH programs on my campus. Where do I put this special education money?

Eddy: First you have to go back to the IEP. The IEP should specify support services which have to be provided for those students. Who buys those support services? There is nothing that says funds from 94-142 or state special education funds

cannot help provide support services, so support services can be paid for by special education funds or by your funds. Some states use the money to have a paraprofessional in the class working with the students. You can also use the money for teachers in the feeder programs providing remedial math, English, and vocational concepts. The best thing is to build an interdepartmental agreement to provide support services.

Audience: Our funds in vocational education come from the federal government and are mandated to be spent on equipment, travel, and that sort of thing.

Eddy: The understanding is this: The basic maintenance of effort for the handicapped youngster must be the same dollar flow as for the non-handicapped youngster. Now if the programs are designed to be separate, the flow can be federal, state, or local.

Audience: Yes, but most of the time when we put handicapped youngsters in a regular program, they do not need any special services, so we cannot use any special education money for them on equipment or travel for the people in that program.

Eddy: That money can be used for supplementary services, paraprofessionals —

Audience: To pay their salaries?

Eddy: Now we are getting into a touchy issue. The money was never intended to buy people; it was intended to buy support services. But you cannot buy an instructor for the program who will teach everybody; that is not allowed. Michigan, Florida, and California all use the money to provide aides, however.

Audience: The only thing we are allowed to use these funds for are travel and equipment.

Eddy: Why? The money was not designed to buy only equipment. It was designed to supply any necessary support services. If people start spending the little bit there is on everything but support services, we will be in trouble. We could use those support dollars to support the vocational teacher, but we end up buying a vocational evaluation system and all this other stuff that never has any effect on the teacher. If nothing goes to the vocational program itself, that is very questionable.

Audience: It is my understanding that you can hire someone as a special tutor or instructor for your exceptional students, but you must document that the tutor is serving those students. You cannot use that aide for the rest of the students.

Audience: I have six industrial programs on the line: auto mechanics, building trades, metal trades, this kind of thing. Within each of these programs, we will probably have a special needs student. Would it be possible to hire an aide and divide the time among these students? In Texas at this time, we have received our allocations and must turn in justifications for those allocations. I hate to turn any money back; I want to use it for our students; yet I do not want to retire early either! Would this be a correct justification?

Eddy: We do not care whether you use the money or not as long as it is used to help the students.

Audience: I have met with our special education director, and it seems they are getting us hung up on excess costs. She said that in special education everything above a pad of paper, a pencil, and an eraser is excess costs. Now in vocational education, the only time we can spend that money is on excess costs. If I had a VEH program, I could spend it right now.

Eddy: No! No, to the special education director, and no, to the VEH programs. VEH programs are not excess costs. They are a program option. The basic maintenance for a vocational program has got to be the same. It does not matter what program the student is in, the basic maintenance has to be from the same source. Get a copy of Dr. Richard Carlson's memo of March, 1978, on excess costs. You need that information. He is the director of Trades and Industries. This memorandum explains excess costs clearly.

We need to hit some basic issues here. First, regardless of how the state allocates funds, the concerns of these protected groups must be an integral component of the eligible recipient application. In other words, when the local education agency submits an application, the concerns of handicapped students have to be included as an integral component. Some LEAs have developed a priority system, where the handicapped are Priority #94. You know: if you get around to it, maybe you will do something. So we are saying that protected groups must be an integral component of the general application.

The second basic issue is this: Insure that necessary supplementary aids and services, auxiliary aids and services, and physical accommodations are also an integral part of a general application. This is a condition for funding. If we get an application that concerns handicapped students, the state has a 90-day period to try to remedy any oversights. We do not want to cut off the money, so we allow this 90-day period.

In addition to being an integral part of the application, these services must be allocated and utilized. For some strange reason, even when the money is allocated, LEAs do not use the money or do not use it for what they said they would. The state has to set up monitering systems to insure that these things are done. LEAs will be accountable just to show that the money is spent for what it is supposed to be spent for.

The next basic issue is to insure that the application for a separate vocational program with support services is made only for those handicapped students who do not benefit in the regular program with support services, and only when due process is implemented and carried out. In other words, you are going to have to show the IEP and due process procedures so that handicapped people in a separate program are not being treated like a class of students. You cannot give class treatment.

Next, provide for program services and activities comparable to those provided by the recipients for nonprotected groups. In other words, compare the services to the majority population. You do not compare handicapped services and minority services; you compare protected groups with non-protected groups.

Insure that application for state and federal funds do not have the effect of limiting participation of handicapped persons in programs, services, and activities, in vocational education. The application guidelines can have the effect of denial, as when you have only this kind of program for the handicapped. The application should provide access to any program the student can benefit from with support. For a handicapped student, we have to take those program elements the student can benefit from, tie them to a job placement, and modify the program to keep the student in it. Even if students cannot complete all course requirements, they can benefit from the training so they can be placed in a job.

Next, insure that the 10% set-aside funds for support services for the handicapped and other protected groups are adequate and utilized properly.

Also, insure that the protected groups are not limited by the application and use of a two-track system, with separate non-comparable and/or non-skilled programs. For example, some handicapped students get their training on the job, down at Charlie's Hamburgers, while non-handicapped students get their training at the vocational school, move into a work-experience program for advanced training beyond the program's limitations, and then go for job placement. These just are not comparable. Charlie may tell the student how to do things,

or he may not. He has only twenty minutes a day to really spend with the student — what is to stop him from taking that time as a break? When the program is over, Charlie will probably hire the student who got the training back at the vocational school.

Next, insure that the funding formula does not provide a lower per capita payment for protected group programs. In other words, the basic maintenance of effort should be equal, regardless. In some states, if it were not for the little bit of federal dollars that come to an LEA, there would be nothing for handicapped students. This is changing slowly. When a handicapped student is dependent on state and federal dollars for a program, it will have an adverse effect. The LEA might not even write for those dollars! If they do write for the money, they use it for restricted programs. So we look at the effect of the application process, how it is written, and where the students were placed. We want the students spread out like other students, rather than grouped together.

Audience: At our school, we have a disadvantaged program called General Construction Trades and a regular program called Building Trades. I am sure the students in Building Trades are going to learn better and finer skills than the students in General Construction Trades. But we do not want to discriminate against disadvantaged students — we want to help them as much as we can.

Eddy: In the counseling program, you have to lay out the program options for students. If someone chooses to go into food services and I provide awareness pictures and a recruiting team that recruits handicapped students and other protected groups, okay. But if the program options you present the student limits the student, then that is not okay.

The final issue is to insure that LEA's and community colleges receive funding adequate for meeting the needs of protected groups located in the communities they serve. Why? Because the application itself may not reflect the community. For example, if the community college is located in an Hispanic area but does not enroll Hispanics, it is not meeting their needs. People always say that vocational education is an elective program. Well, it is and it isn't. If the community college and high school tell the junior high school, through recruitment in Spanish, that they want these students, then the students will come. For minority groups and women, the law says you cannot discriminate at admission; for LEA students and handicapped students, you have to provide the instruction itself in such a manner that the students can benefit from what you have to offer.

Audience: What if we do not need these state or federal funds to serve handicapped students?

Eddy: If you can do without the money, fine. We do not care where your money comes from. What we look at is the effect your program has on handicapped students, and these are the basic funding issues we look into.

THE LITIGATION PROCESS IN TEXAS

ROBERT HOWELL

Formerly a hearing officer and currently on the staff in the Office of General Counsel at Texas Education Agency, Mr. Howell is well qualified to speak on this topic. In his presentation he reviews the legal questions that have been raised in Texas concerning the education of the handicapped and how these questions are resolved. What he has to say is valuable both to administrators and to teachers, who can play a major role in avoiding the necessity for legal intervention.

A lot of the problems that I am going to talk about are problems that lawyers have because they are working with educational issues. You have to understand that when all this started, we did not know anything more about this than you know about practicing law.

Lawyers are viewed with quite a bit of suspicion and distrust. When an attorney comes into a hearing process to conduct a special education hearing involving the placement of a handicapped child, generally nobody is glad to see him — especially when he comes from the Texas Education Agency. The first thing the attorneys and the hearing officers have to do is divert all these fears and all this distrust. Then they can get the system going.

Many problems have been caused because school administrators resent a rule change that came into effect with 94-142. It used to be that when a parent got upset with the placement of a child, the first step was to ask for a hearing with the local board of trustees. Then, if the local board of trustees did not overrule the special education people, then and only then could it be appealed at the State Commission of Education. Now whenever negotiations break down between the parents and the special education folks, the appeal goes directly to the Commissioner of Education. The school administrators and special education people feel like this has removed the opportunity for them to resolve the case at the local level since they are denied the hearing before the local board of trustees.

But as long as channels of communication are open, you still have an opportunity to resolve problems and sit down and mediate with the parents. When the communications finally break down and the frustrations reach the limit where parents do not feel they can trust anybody, that is when parents file suit. I have found that when it comes to the hearing process how well you are able to resolve it is directly in proportion to how mad and inflexible the parents are. The school personnel are generally fairly flexible by the time they get there.

When the new regulations which said we are going to do

away with the trustee hearing were first passed, the hearing officers that are out in the field began hearing cases on a contract basis. They are not employees of the agency, that is prohibited. They are paid on an hourly basis. We thought with the new ruling our case load would increase. Instead, the case load dropped by about 75%. Before this change, the special education people knew that the parents had to go through the frustrating step with the board of trustees before any other action could be started. They knew the serious negotiations would not even get started until the parents asked for a hearing. When we took the board step away from the special education people, they realized they would not have that buffer. So they started negotiating in earnest and the result was that more cases were resolved and less got filed. Ultimately, instead of increasing the amount of appeals, this ruling drastically decreased them. In fact the hearings practically dried up.

When you speak of litigation you are essentially referring to the issues of evaluation and placement. The independent hearing officer is not an Education Agency employee and is therefore impartial. The only things the hearing officers are interested in are the issues.

There is a problem having lawyers deal in educational problems. It all started when lawyers in Washington decided they were going to write an education bill. P.L. 94-142, the federal regulations and the state policy handbook on handicapped students are both nightmares. They are like reading a French dictionary backwards. It took me about two months just to figure out what they were generally about. And when lawyers and educators get together, there is a parent in the middle. The parent speaks English, lawyers talk legaleze, educators speak educationeze and nobody understands anybody else. So we are trying to learn together. You are going to have to pick up on the legal end of it a little bit to know how to protect yourselves. The lawyers, on the other hand, have to try to learn the education end of it, or as much of it as they can. And we are both going to have to communicate with the poor parent who still speaks English!

I want to talk specifically about the hearing process and the actual conflicts that we are getting into. This is where all the real issues are determined. The single most glaring problem in the hearing process is in the competency of the legal council. The school lawyers and the lawyers coming to the hearings to represent the parents do not have any idea what they are doing. There is enough in 94-142 to keep a lawyer busy for six months just learning what it is all about. Law is getting very very specialized nowadays. Courts are always changing things and surprising people. So keep in mind that your school lawyer does not necessarily know everything about what is going on.

I have never seen a professional job done in a handicapped case. There have only been two instances where they knew enough about what they were talking about to just get in there and function. To date, I have never seen an attorney for a parent that could get in there and hold his own in a special education hearing. Usually what happens is that a parent will go to the lawyer that wrote their will or handled their traffic ticket and say, "My handicapped child is having problems at school and they have put him in vocational education. He should not be there and I want to file an appeal. Can you represent me?"

The school is not in any better shape than the parents are. I have seen attorneys do such a bad job for school districts in representing these cases of handicapped children and 94-142 that I have put it on the record that the school attorney was apparently unprepared for the case, just to protect the appeal. This is devastating because an entire record is compiled at the hearing level. If there is an appeal to a high facility, it goes on the record. I have actually seen attorneys come into the hearing room and not know what the issues were. I have had the school attorney ask me what I mean by an evaluation. This is the big problem — incompetency of the counsel.

In a hearing, there are two competing interests. First, you have expectations of a parent, which in most cases are unrealistic. In the majority of cases when an appeal is filed it is because parents are being somewhat unrealistic, if not totally absurd about the demands they are making. A lot of parents are not even able to accept that their child is handicapped, so are really hoping for a miracle. It is an emotional problem. They hope if they complain enough the school district will keep trying things until it finally hits upon a teacher or a system that works.

Second, you have the administration with its cash box with only so much money to go around. Those are the two competing interests.

We understand that the educators are in the middle — between the administration with their tight hold on the purse strings and the parents with their unrealistic expectations. Not only that, educators have to be a shield or a buffer between the two. When a parent comes in complaining that his child needs speech therapy or her child needs something else, the educators cannot say, "Well, I realize that, but the problem is with the school board. They will not give us the money to provide more services." Nor will educators get much assistance from administration. The best bets for educators are communication between the parents and the school system, and ultimately, the hearings process.

Another problem is that of placement. There may be a situation where students are inappropriately placed. The vocational education people are not necessarily a part of the A.R.D. process even if the student is going to be placed in vocational education. Ultimately, it gets down to a power struggle in the A.R.D. committee as to whether the vocational education people have the right to overrule the special education people who want to put the students in vocational education. It is a very difficult situation when the vocational education people feel that a student should not be in vocational education. If you feel the placement is not appropriate, the thing to do is try to work through the parent. Find some way to let them know that you do not feel that this is an appropriate placement so they can initiate a hearing. They can get to the Commissioner of Education and that will solve your problem.

Another unique little thing that I have found in these vocational education situations is on the other end of the spectrum where a student who is not in vocational education really ought to be there. Special education folks sometimes get possessive. I have seen situations where vocational education people have said, "Hey, we need this student in vocational education. He needs to be in vocational education."

And the special education folks are saying, "No, he's ours and you can have him when I finish teaching him how to write like Thomas Jefferson." This situation can also go to a hearing.

Let's assume for the sake of argument that you have gotten to the point where parents are so unhappy with you that they decide they are going to file for a hearing. Generally this only happens when communications completely break down — when everyone has finally quit talking. That is the worst possible situation. I have had to physically restrain parents in a hearing to keep them from going over the table after the special education people. The only way you can settle it is to restore the communication channel between the parents and the educators involved in the dispute.

One of the best tools, usually overlooked, is a prehearing conference. Request that all parties be pulled together for a prehearing conference. Most school lawyers do not even know they can do this. If your attorney does not set one up at his own initiative, demand one. Do whatever you have to, because it is

probably your best tool in the whole hearing process. It gives you an opportunity to sit down in a neutral atmosphere with the edueators and their attorney, the parents and their attorney, and the hearings officer, in an informal atmosphere without a court reporter, to talk over what everybody is unhappy about. It gives you an opportunity to determine what the parents are really unhappy about and what you can do to settle the thing short of going to a hearing. If they tell you what they are unhappy about, that puts your attorney on notice of what the issues are going to be.

Remember that you need to educate your attorney with regard to the issues, evaluation, placement, and whatever else is involved before you go into one of these conferences. It does not do any good if he does not know what you are talking about. He at least ought to have a knowledge of the steps that special education folks have to go through to evaluate and place a handicapped student; and really he should know more than that. How much education he has is generally going to depend on you.

The prehearing conference is much more effective because, instead of having to go to a hostile school board, the parents are sitting down with a neutral party. At a board meeting, the parents are sitting there all alone against the administration. The best advice I can give you about preparing your counsel is to go through the TEA policy manual and the plan for the handicapped person. Go over the breakdowns for 94-142, and make a check list to see if you have complied with everything that you have to comply with. If you have done that, generally speaking, you are going to be in pretty fair shape.

You must also understand that you people are the experts on special education and vocational education. You are the only ones — the lawyers do not know, the parents do not know, the witnesses do not know. Most of the experts they bring to the hearing to testify do not really know what proper placement is. You are the only ones that *really know*, and you have to educate everybody else. Never lose sight of the fact that you know more about the problem than anyone else does.

There are only two general issues when you get to a hearing. One is the evaluation; the other is the placement. The party that is bringing the complaint has the burden of coming forth with evidence and proving their case. P.L. 94-142 has a provision whereby the parents are entitled to an independent evaluation at public expense, if they demand it. The first thing they can do when the hearing is convened is say, "We do not agree with the evaluation. We want an independent evaluation, and we want the school to pay for it."

They are entitled to this, absolutely free, unless the school district takes a stand to prove that they have done an adequate and sufficient evaluation. If the evaluation complies with the law, the parents should not be entitled to another, and the district should not have to pay for another. In that instance, you immediately have another hearing to determine whether or not the parent is going to get an independent evaluation. This shifts the burden of proof to the school, to prove that they have done the evaluation correctly. This is a trap that some school lawyers fall into because they do not understand the proceedings.

Be aware, as well; that strict compliance with the Policy Manual and 94-142 may not be enough if there are certain circumstances involved. Let me give you an example. I had a hearing where I dealt with a Down's Syndrome child. They usually are very loving docile children. It is very rare that you find one that is hyperactive. This one used to be very docile but over a span of about two years had gotten to be very hyperactive and was now at the point where she was violent almost all the time. This should have been a red flag. I recognized it and I am not even a special education person. The district contended their evaluation was proper and the parents were not entitled to anything else. They had run the standard tests and wanted to get on with the placement issue. I told them to reevaluate and look at the child to determine if there might be some other problems that were causing this emotional outburst from the child. Perhaps something that did not really relate to anything that they had already found. Sure enough, they found something and it cured the problem. Instead of being in a hearing three or four days and ending up with mad parents, we got it all resolved and everybody was happy.

We must keep in mind that there are special circumstances where you are going to have to go farther than what the law says you have to do. School administration is scared to death of the hearing process, especially in our society where everybody is conscious of litigation. People wake up in the morning thinking about who they can sue. School districts are really paranoid because first of all, they do not like spending money for legal fees and secondly, they are worried about what the outcome will be — if it will set a bad precedent. They are terrified of things like residential placements; they are terrified of having decisions come down to say facilities are not adequate or that more teachers are needed.

The fear of the legal process is something that the school districts need to overcome because the hearing process can be a tool for the schools as well as for the parents. Anybody who has been involved with a handicapped student has known at least one set of parents who are totally obnoxious, totally unreasonable, and spend all of their time making the teachers just completely miserable. There is at least one of them in every school system of any size. The net result is that they are such a thorn in the side of the educational process that it breaks down the process not only for their child but for the other students as well. The hearings process can help solve this problem. So try not to view the hearings process as your enemy. It can work for you in certain instances and you need to keep this in mind.

If you have a situation where you feel you might need to go into a hearing, sit down with your school attorney and go over what you have done. Ask him if you are in legal compliance. If you are in legal compliance then sit down with the special education folks and determine whether or not you are in educational compliance.

I want to mention a couple of other things that I know some of the vocational education people are concerned about. One is discipline problems with handicapped kids and what to do. I realize that sometimes handicapped students are put in vocational education situations and either because of their difficulty or because of their emotional condition, an undue amount of time is spent on these kids. The effect is that the educational process for the other children is suffering. You feel you are spending so much time making sure this student does not cut his hand off in the bandsaw or keeping him in line that you cannot teach your classes. You have got a serious disciplinary problem. What can you do? There have been two lines of opinion that have come down from the federal courts on disciplining handicapped students. One of them has said that you cannot suspend a handicapped child at all because a suspension is a change in placement and a change in placement can only be done by the ARD committee so any suspension is illegal. The other line of opinion has talked in terms of whether this behavior is an outgrowth of the handicapping condition.

If you have a disciplinary or a behavioral problem with handicapped students the first thing that needs to be done is to have the ARD review it and determine whether or not this behavior is linked with or is an outgrowth of the handicapping condition. If it is determined that it is, then that student cannot be suspended. You would be suspending him for his handicap and essentially punishing the student for being sick. That is

against the law. It is unconstitutional. The student might have to be put somewhere else but cannot be suspended. He can be put into a more restrictive placement under 94-142, somewhere where he can be controlled.

If the ARD committee determines that the behavior that the student is exhibiting is not an outgrowth of the handicapping condition, they can let the administration deal with him like any other student. For instance, let's say you have an emotionally disturbed student who is causing problems or an LD child who gets out of hand. It is conceivable that his outbursts could be an outgrowth of the handicapping condition. That determination would have to be made by the ARD committee. Let's assume though that you have an orthopedically handicapped child who cannot walk, who is in a wheelchair, and insists on smoking cigars in the library. Now it is going to be pretty hard to tie that cigar in with his feet. Just because you are handicapped you are not entitled to more of an education than a nonhandicapped child. You are just entitled to a special education — to an appropriate education. So you are not shielded from discipline if the behavior is not linked to the handicapping condition. That determination has to be made by the ARD committee and has to be made before anything is done. The only exception to that rule is if the student is exhibiting behavior to the extent that it endangers his own health or welfare or the health or welfare of the faculty or the other students, he can be put out of school immediately on an emergency basis. But the ARD still needs to be called as soon as possible.

In conclusion, I just want to impress on you that this is all a new process, that P.L. 94-142 was just put in motion September a year ago. We are still learning and it is going to be a struggle, but we should all have the same goals. New problems will crop up all the time. A lot of you may not be aware of how receptive the legal division at TEA is to helping people in the field with their problems. The agency answers any legal inquiry that anybody might have, be it an administrator or special education teacher or vocational education teacher, a member of the public, an attorney, or what have you. If you call us up and ask us a legal question that has to do with education, we either answer it then or find out the answer. Lines are open so if you have a question, rather than guess at it and make a mistake and get yourself in trouble, give us a call.

TEA: A NEW DAY DAWNING FOR VOCATIONAL SPECIAL NEEDS STUDENTS

ELEANOR MIKULIN

In recent months, students with special needs have become a priority in vocational education at TEA, including handicapped and disadvantaged students and students with limited English. Funding and program redirections have been instituted to meet this priority. Eleanor Mikulin, coordinator for special needs within Occupational Education and Technology, reviews these recent changes and answers questions related to the mandate for vocational assessment.

There has been a great deal of discussion lately about vocational assessment. The special education policy manual says that all handicapped students that enter into a vocational program will have vocational assessment. This policy manual was printed and distributed in January but the first readings and hearings were last August, the Agency has been flooded with questions about the new policy.

In order to better address these questions, an interagency task force has been identified with people from vocational education, special education, rehabilitation and mental health /mental retardation. This task force will begin by taking a look at six projects that have been funded out of vocational education money and have been working with assessment in the state. The interagency task force has been charged with taking a look at the projects that we feel are good, bad or indifferent and coming up with a handbook for all school districts to say what vocational assessment is and how to plan for vocational assessment.

Although we are still in the planning stages to provide you with guidelines for vocational assessment, you have already been mandated to do a vocational assessment on all special needs students entering into vocational education. So until you are provided with guidelines, these are some things you need to consider. Work behavior and classroom behavior that parallel work behavior should be considered. Any work samples that you have available and are using may be part of this evaluation, and also counseling to see what the student is planning in relation to his career abilities. These are just some of the things that you may use to document the fact that you have considered all the options available to you in assessing the student prior to placement in vocational education, and prior to the agency supplying you with some guidelines.

Audience: Who is going to do the vocational assessment?

Mikulin: All of the assessment techniques that we have listed, special education does. One thing that a vocational program may contribute is looking at hands-on evaluation. This input could be used.

Audience: What about the observation of work behavior?

Mikulin: Anyone who has been working with the student can give their observations of classroom work habits, whether

this includes employability skills or work habits after placement. You should work together, with various people doing the observation until otherwise instructed. It is the responsibility of special education to provide this extension of assessment prior to placement in vocational education. We are saying right now, do not spend a lot of money. There should be no additional cost. I think most schools can take a look at what they have and pull together something that they could call a vocational assessment without too much problem, until we get the guidelines out.

We are not talking too much right now about the vocational education assessment specialist that is identified in the *Policies and Procedures Manual* — the person who has both vocational education and special education certification. I think, (1) that you are not going to find very many of those, and (2) that even if you do, they are not necessarily qualified to do vocational assessment.

Audience: So what do you think is going to happen to the statements about dual certification?

Mikulin: The two certifications are not necessarily going to help you be a vocational assessment specialist. There are several schools that are looking into writing a program for vocational assessment. East Texas is talking about one for the Fall, North Texas has an ongoing assessment program which is more or less for rehabilitation people. But until further information is available you should not go out and try to start a training program.

The important thing to remember is that the ARD committee should have vocational people represented when they are planning vocational training. I do know that special education in their monitoring is finding that the majority of schools do not have vocational people on their ARD committees. This is in violation of policy, and certainly in violation of good planning processes.

Audience: Being a VEH teacher, we are part of both special education and vocational education and we are at the ARD. Are we considered this vocational person?

Mikulin: It is the vocational person who will be receiving the student that should be at the meeting. If you are going to put them in auto mechanics class, the auto mechanics teacher should be there to help develop the IEP and also to learn about the capability of the student. You also need to have a director or superintendent at the meeting. But in any case, the teacher that will receive the student should be present, just like the VAC should be there if he or she will receive the student.

The new laws, P.L. 94-142 and P.L. 94-482, both specify that handicapped students should be placed into vocational programs, and indeed all programs, in the least restrictive environment. Therefore, handicapped students should be placed into the regular programs unless there is no possibility for the student benefitting even with support services. From state statistics last year we found that Texas was not doing very well when it came to putting handicapped students into vocational education. We found that out of approximately 71,000 handicapped students in age 14-21, only about 26% of these students were in vocational education or VAC programs. Fifteen percent of the handicapped students age 14-21 were placed in vocational programs or skills building programs. We also found that handicapped students were not always placed in the least restrictive environment. We found that out of the 71,000 students, only about 1,700 were mainstreamed into regular programs. I am anticipating that the mainstreamed population has grown this year. I do not think that only 1,700 mainstreamed kids could cause as much complaining from vocational teachers as we have gotten this year! There is just no way. So there will have to be an increase in mainstream students.

Also, out of those 1,700 mainstreamed, over 700 of those were learning disabled (LD) students. We found about 900 in CVAE programs and 4,700 in VEH programs, 2,000 of which were LD students. The purpose of a VEH program is to provide a more restrictive environment for those handicapped students who cannot succeed with special assistance at any time in regular classrooms. These VEH classes are self-contained, segregated classes and are the most restrictive environments on school campuses. We are slightly disturbed at finding that half of the population in VEH classes are LD students. School districts could be charged with discrimination for this kind of placement. Typically, an LD student is going to be in a regular classroom the majority of the day. If you have students in a regular classroom half the day and then put them in a VEH classroom for the rest of the day that will be questioned. So you better look at the placement of handicapped students into regular programs. VEH programs are set up for more moderately handicapped students. I am not saying severely handicapped. I am talking instead about those who have potential with training, who could be taught a skill and who could then be placed on a job by a VAC.

Audience: May I ask a question that is back on assessment? You say here that when moving special education students into vocational education you must have a vocational assessment. Is that not in itself discriminating against handicapped students since you do not also require the regular students to have a vocational assessment?

Mikulin: You would ask that question, wouldn't you? I asked that question a little bit over a year ago and got no answer. And when Bill Halloran from the Bureau of Education for the Handicapped (BEH) was here doing a BEH review of special education about a month ago, he asked that question. As far as I know he got no answer, so you will get no answer either! I think you can answer your own question, however. It is a practice that should happen before placement into vocational education classes, but it may have been more easily acceptable if we had said that, in consideration of placement, a vocational assessment should be done. A vocational assessment would be ideal for disadvantaged students too. If we could set up a system of assessing handicapped, disadvantaged, and regular students, if they so desired, that would be better.

I think that all of you are going to have to make sure that assessment will be used to identify the best placement and the best classification for the handicapped student. We keep referring to P.L. 94-482; I do not believe anyone has mentioned the statement from the Office of Education saying that all handicapped students should receive appropriate vocational training. This is in the Federal Register also. So we are mandated to provide a vocational training for every handicapped student that needs vocational training. We have also been told that our definition of vocational training is tied to funding categories and that vocational education for handicapped students does not necessarily mean a vocational education classroom. It simply means that every handicapped student will receive vocational training, possibly from special education, to get them ready to enter into a sheltered workshop. But we are looking into providing vocational training for all handicapped students.

I have one other topic that I wanted to cover particularly for the VAC teachers in the crowd. The topic is tax-target credit. If you are unfamiliar with the VAC program, you may not know about the tax target job credit. Vocational co-op programs are involved in placing co-op students into jobs that qualify the employer to receive tax credit. Questions have been asked for about a year or a little bit longer. The federal guidelines for federal co-op programs say a co-op program is alternative instruction, where classroom instruction alternates with job

training placement of the student. The VAC full-time student is as now not eligible.

There has been a problem with getting guidelines set up to allow the VAC program to be a cooperative school program. It is at the discretion of the Associate Commissioner for Occupational Education and Technology in our state to define what a cooperative program will be and therefore Mr. Caster and others at the Agency have set the requirements. Eventually they will be part of the *Vocational Education Guidelines*, but I will list them now to give you an idea of what will have to take place in order to make a VAC student eligile for a co-op program, which will in turn make it possible to provide an employer with a tax credit.

First, the student must have a written cooperative training plan. This will be a training plan that is comparable to any other plan that a co-op student will receive. It is a written plan developed between the school and the employer. The second requirement will be that the occupation in which the student is being trained is identified with a 6-digit Office of Education code. This code identifies all of the jobs and sub-parts of the jobs. The vocational people are identifying their jobs by code number and will be identifying the student placement by code number. When the VAC works with school vocational people they will have no problem to identify the job code. A third requirement is that a student educational program must include an alternation between school instruction and hands-on job training, planned so that school instruction and occupational instruction each contributes to the student's education and employability. The vocational co-op program that is in practice at this time has one hour of school instruction and one hour of on-the-job training. In the case of senior VAC students, the alternating instruction would be under the administration of the VAC or someone identified by the ARD committee.

Now we can go to questions.

Audience: Would you explain to me exactly what you mean by the statement that the VAC is to provide hands-on instruction in a job situation?

Mikulin: I did not say the VAC; I said the in-school instruction. It may be true that in your school that will be the VAC. If you are going to do this, you will assist the student with employability skills — whatever is necessary to get the employability skills, not on-the-job skills.

Audience: But that has already been done when the student goes to work for eight hours a day. Are we to attempt to do that while the student works forty hours a week?

Mikulin: The ARD committee identifies the alternating classroom and job instruction. That is when the decision is made as to whether the instruction takes place during the senior year or during the junior year.

Audience: I have been told that for this particular year we are supposed to instruct our full-time employed students one hour a week. Can you tell me how to do that when we have a working student who leaves at 6:00 in the morning and comes home after dark, and who is often under pressure to work Saturday and Sunday as well?

Mikulin: A handicapped student in a VAC program working full-time should receive training or contact one hour a week. This can be contact on the job, in the school, after school, by telephone, or at home. That gives you some option to work it out.

Audience: On this target tax job credit, are you saying that in the future, VAC's should be certified?

Mikulin: No, I am saying that the VAC will be able to put students on a job and do the three things that we mentioned to make them part of a co-op school program. That has nothing to do with them being certified.

Audience: You mentioned that VEH programs are for those who are more severely handicapped, rather than for those who can succeed with modifications in the regular environment. With the increased emphasis coming from Washington, will we be looking in Texas at some modifications of VEH programs to serve the vocational specific needs of the severely handicapped students? This might be student employment within the community rather than sheltered workshops, for example.

Mikulin: Please understand me. I am saying that LD students should probably not be in the VEH program since the ARD might be discriminating by putting them in a self-contained situation. Likewise, I would say that severely handicapped students should not be in a VEH unit. Perhaps they cannot be trained specifically to do a job in the community. But within a given range of handicapped student, the high level should either be strictly mainstreamed or mainstreamed with additional resources. The mid-group belongs in a VEH unit if it is available. The low group will typically receive vocational instruction from special education rather than vocational education teachers.

Audience: When the vocational training is completed then we have placement. Our vocational adjustment coordinators may have trouble because most of their experience is in placing those students who are mildly handicapped, generally 50, 55 IQ and above. Are we looking for those who are below 50 or 55 IQ, who are more severely handicapped?

Mikulin: VAC's will need to consider the fact that they are going to serve more severely handicapped students. So this would probably be something that we would be looking forward to, and there will be a need for additional training.

We talked a little bit about mainstreaming into regular programs a while ago. I did not get down to where the students are placed, in relation to the VAC's classes. We know that last year we had over 10,000 students in VAC programs. Of those, over 7,000 were LD students. Again, you get to the point where you ask, "Is it discriminatory to place LD students in a more restrictive environment?" The VAC classroom is self-contained, and therefore not necessarily a least restrictive alternative. Furthermore, out of the 71,000 students that need training, only 15,000 or 16,000 are in either vocational education or VAC classes. What is happening to the rest of the students? There are some 50,000 for whom no training is provided. We know that some of them are low level students and cannot use services or vocational training. We know that another group are LD and may not need vocational training. They are mainstreamed LD or physically handicapped students and they may not need vocational training because they have chosen college preparatory courses. But we know that there will be some of the 50,000 students that still need vocational training at some time to allow them to move up. Someone will have to pick up these loose ends and provide training for these students. In the future, lots of planning, lots of putting together of funding, from special education, rehabilitation, and whatever other sources can be found, needs to take place. I think we are looking at the end of the strictly VEH unit or CVAE unit because there will not be that much demand for these programs with the pressure to mainstream.

Audience: Are there new funding opportunities for small districts so that we can insert students into regular programs rather than build new VEH programs?

Mikulin: The federal funding formula that schools have just received allows excess costs to be used.

If there are no more questions, thank you for coming. Have a good day!

RESEARCH ISSUES IN CAREER/ VOCATIONAL EDUCATION FOR THE HANDICAPPED

GEORGE FAIR

As Project Director of Vocational Education Programming for Special Education Students in Texas for 1980, George Fair is perhaps better qualified than anyone in the state to give an update on research needs. Dr. Fair, who has a Master's and Doctorate Degree in Special Education from the University of Pittsburgh, is presently investigating the accessibility of vocational education programming for handicapped students in Texas. His presentation includes current research questions and possible strategies for investigation.

In this session I want to talk about a research project with which I am currently engaged. Then I will talk about some of the questions that have come up as a part of this project, and decide some of the areas that indicate further research may be needed. What I have distributed to you is an abstract of the project on which we are currently working. The basic reason for the project is to assess the current status of vocational education programming for handicapped students in Texas. This is the second project that we have done. We completed a project like this four years ago so this is really the second go around for us.

We are doing this project a little bit differently than we did the last one. With the last one, we worked primarily with a questionnaire in school districts all over the state. With this present project we are visiting school districts, two in each service center region, for one or two days. We talk to the key personnel in each of those school districts, such as the vocational education director, the special education director, a secondary administrator, a vice-principal, a counselor, special education teachers and vocational education teachers, a parent of a handicapped child and a handicapped student. We are trying to find out the status of vocational education as it relates to regular vocational education programs, to CVAE, and to VEH programs.

There are five objectives by which we are working. The first objective has to do with the assessment or diagnostic procedures that are being conducted in school districts for handicapped students. We are trying to ascertain if vocational assessments and evaluation procedures are being used by school districts. We are finding out that in most cases there are really very few assessments or evaluation procedures that are being used. As you know, any student that is being considered for vocational placement should have a vocational assessment. At this point it is not well defined as to what that is or how it is to be used. We are finding that most school districts do not have systematic procedures or evaluation procedures for students before they go into a program. In most cases it is done by the vocational teacher who says, "I think that student can succeed."

Audience: Is your project trying to establish guidelines or a policy for assessment?

Fair: At the present time we are not trying to make any policy. We are just trying to find out what is going on. There is a task force that is working on this. We are trying to see what is happening in the field and are finding that nothing much is happening.

Audience: How are you defining "handicapped students"?

Fair: We are defining handicapped students as those students receiving special education services by the regulations published by the Texas Education Agency. This means any handicapping condition, mental retardation, physical handicap, or mental disability.

So one of our objectives is to find out the status of vocational assessment. A second objective is to determine the involvement of vocational education personnel in the development and implementation of individualized educational plans or programs (IEPs). Are vocational personnel being involved in their development and utilization? Our preliminary information shows us that they are being involved in the development to the extent that a vocational person attends the ARD meeting. That is probably the one most concrete thing that we have found. The actual amount of involvement varies. In most cases, it is very little other than saying, "Yes, we think that Johnny can go into diesel mechanics." At that point the goal for the meeting is just placement. They identify the particular program in which the students will enter and that is the extent of it. I wonder if that is specific enough? Is it detailed enough? Is that what we mean by having an operational IEP? We are also finding that the IEPs have been filed away and they stay in that file until the next time somebody says we need to look at them. That obviously raises a question: Is that what we mean by having an IEP — having a document on file that keeps us clean as far as the regulations are concerned but is not operational? That is what we are finding in most cases.

A third objective relates to the number of special education students served in a regular, CVAE, and VEH program. We are comparing this with the data that we received four years ago and there is no question about what we are finding. There are a lot more handicapped students in regular, CVAE and VEH programs now than there were four years ago. Progress has been made from the standpoint of numbers.

Audience: Do you find that most handicapped students are still being placed in special programs?

Fair: Yes, we are finding that pretty much across the state. In most school districts we are finding that there are one or two students that might be in a regular program, depending on the

size of the school. But there really is some progress that has been made when we look at it in terms of four years ago. That is a positive point. But when you look at it in terms of percentages of handicapped students that are served, it is not how we really want it to be.

Audience: Do you think that you are not coming up with larger numbers possibly because the student is not identified as handicapped?

Fair: Yes, that could be part of it. The whole question of the identification of handicapped students in vocational programs is one that we are going to get to. We are finding school districts in which there are handicapped students in the vocational education program and the teacher or instructor has not been informed that these students are handicapped. This has been done in two ways. It has been done in certain situations where there is a communications problem, where for some reason the information has never gotten down to the instructor. In other school districts the vocational education and special education directors are proud of the fact that they have placed a student in a class and have failed to tell the instructor and they say, "That is the way we play."

That raises some very interesting questions. If this student has certain kinds of weaknesses in which he needs to improve, this should be conveyed to the instructor. But a number of vocational people have said that if we tell the instructor that this is in fact a handicapped person then the dynamics change. Somehow the instructor changes the way he approaches the individual and the instruction is changed.

Another objective relates to the instructional process. We find some places where there are handicapped students involved in the instructional process of regular classes and CVAE classes. How does the instructional process change if it actually does change? What modifications are being made? As you delve into the federal legislation it says that in the inclusion of a handicapped person you should make modifications and adaptations to the program. The one modification we are finding that is happening in the schools is that some people say, "Well, we test them orally rather than with a written test." We have had people who say, "We modify our grading and grade more on attitude and attendance than we do on objective task performance."

Lastly, we want to know what changes, what services, and what programs one will need to increase the participation of handicapped students in the programs.

We hope this research that we are conducting will be helpful to the Texas Education Agency in helping define regulations and procedures for school districts, that it will be helpful to school districts to know what other school districts are doing and how they might modify what they are doing. This will also go to institutions of higher education that train vocational teachers, train special education teachers, train educators in general in terms of looking and recognizing what the needs and priorities are.

We will publish a report that will be sent to the Texas Education Agency and to all the school districts that are cooperating with us. We will have a number of copies that will be available simply on request. We have had some inquiries already from people who serve on legislative committees who are trying to prepare reports for the next legislative session in January (which, by the way, will probably bring with it some changes).

What I would like to do for the remainder of the time that we are here is take three areas and discuss them with you, get some of your opinions and also stimulate your thoughts. I do not have the answers but I think that one of the functions of research is to raise questions. That is one of the things that is happening as we do this. Other questions are being raised, more detailed questions, and I think that the only way that we can begin to look at those questions is through further investigation and through discussions with people like yourselves who are involved in some of these processes and want to lend some direction to them. I think one of the ways of trying to find solutions is to first find out what happens, what goes on.

The three objectives that I have chosen to deal with a little more extensively are the ones related to vocational assessment, IEP development, and instructional barriers. For vocational assessment, some of the questions that we have already asked are: Who should conduct the assessment? What are the components of an assessment? What are the goals of an assessment? How will the results be used? When should an assessment be conducted? For IEP development, some of the same questions are: What is the level of vocationally oriented goals in the IEP? Is just deciding placement enough? Are goals all we need to have a functional IEP? How should the IEP be used by the vocational teacher? What is the appropriate use of IEPs?

Audience: How specific should the goals be in the IEP?

Fair: The IEP should be something the teacher can look at after a two-month period and say, "Yes, we have accomplished goal number one. Now we will move on to goal number two." I want to know if you can write them that way.

Audience: Should the special education teacher see to it that the IEP is working?

Fair: I do not think the special education teacher has the sole responsibility of operating the IEP. The vocational teacher and the special education teacher have an equal responsibility.

Now we are going to move on to the instructional process. One of the questions that we talk about is including handicapped students in the regular vocational education programs. When we say that, the assumption is automatically made that somehow by the mere fact of the inclusion of a handicapped student in class, the class is going to change. The class is going to be harder to teach, or become more difficult for the non-handicapped students and that you should not have too many handicapped students in there because if you have too many then it will not be safe. Does the inclusion of a handicapped student really change the instruction? Yes, I am beginning to notice that the mere inclusion of a handicapped person somehow changes the dynamics of the instructional process.

One of the things that is important in this process is the attitude of the teacher. What ways could we identify that the instruction may be affected? What I hear people say so many times is that we have one handicapped student in auto mechanics and one handicapped student in agriculture and one in homemaking and so on but we do not dare put more than one in each class because if we do somehow that makes the instructional process change.

What are the dynamics of the change? How is instruction changed? What does attitude really mean? Does it mean that the teacher expects less of the handicapped students? Does the teacher expect the handicapped student to perform in a different way and therefore present the instruction differently? What are some of these implications?

Some teachers want to instruct in a group or small group process and the feeling is that the handicapped students will change that kind of instructional motive.

Audience: Is the trend now to individualize instruction?

Fair: Now we have all had the handicapped student who is in diesel mechanics but is also still taking some special education courses. How do we coordinate special education and vocational education? Some people say, "Well, special education

teachers should tell the vocational education teacher about the student." I guess I am questioning whether the special education teacher has anything to tell the vocational education teacher. Can the special education teacher communicate well enough to the vocational education teacher in a way that is meaningful or is there some other model of communication that can be useful?

We think, in a situation where we have a special education student in diesel mechanics class, that the special education teacher should visit the diesel mechanics class once a month for one period a day. That is what I mean by a model. At least the teachers should visit one another rather than just talking in the IEP meeting, because in the IEP meeting everybody comes in there with 75% of their program together and there is not much left to do, not much dialogue. There has to be some procedure in which special education teachers and vocational education teachers can really interact with one another.

We are trying to raise questions. Think about these questions and perhaps this kind of thought process will assist us in meeting the needs of the children with whom we are working.

EDUCATORS AND ADVOCATES FACE OFF

DAYLE BEBEE, ROBERT CASTER, DON PARTRIDGE, PAM WETZELS
LINDA PARRISH (Moderator)

Too often educators and advocates seem to be at cross purposes. Advocates of the handicapped may claim needed services are not forthcoming from education, while educators — bound by regulations and limitations — may claim that advocates demand too much. All the while *both* want the best that is possible for students. In this panel, educators and advocates meet face to face and bring some of their concerns out in the open.

Dr. Parrish is coordinator of the Vocational Special Needs Program at Texas A&M University.

Parrish: We are privileged to have four very distinguished people to entertain questions concerning vocational education for special needs students. We tried to put together a varied panel so that their issues and concerns would be valuable to everyone. First, we have Mr. Don Partridge. He is Director of Special Education at Texas Education Agency. On the vocational side, we have our new Associate Commissioner of Occupational Education and Technology, Mr. Robert Caster. Pam Wetzels is a parent of two handicapped students in the Austin Independent School District; one in junior high school and one in high school. I thought it would be interesting to have the parent's perspective. We also have Dayle Bebee, who is the head of a group in Austin called Advocacy, Inc. She is a lawyer there and has worked with many people in the schools who have been striving to get participation for handicapped students. So with that illustrious panel, we will get started.

Dayle: I am the director of a statewide advocacy system for handicapped individuals. We are interested in education, particularly with P.L. 94-142 and Section 504 of the Rehabilitation Act. We have been in existence about two and a half years, helping parents understand more about the education of their handicapped children. Also, we have worked quite a bit with schools. We do a lot of inservice training with school districts, administrators, principals, and directors of special education; we are very pleased that they have found our materials to be helpful.

For example, we have a 116-page parent manual with samples of letters, and explanations of how to request an evaluation, how to get into the referral process, and how to put together an individual education plan checklist when you are ready to go to the ARD committee to write the individual education plan (IEP). It is a manual that is chock full of helpful information for parents and also for school teachers. I think it is really important to build communication between school officials and parents. It is also important for parents to get notices of their responsibilities and their rights and to know what the school district intends to do at the point in time when their child is identified as possibly needing special education. We have a complete listing of all the rights derived from 94-142 and TEA Policy and Procedures Manual so parents can be informed about these. We also have a checklist that can be used by parents to be sure they have the information they need and by school districts to be sure they have informed parents about this and given them all the information they need. We have worked with about 2500 families in the state and a large number of school districts in solving problems in special education.

Parrish: Mr. Caster, would you like to make a statement on the commitment to special education within vocational education?

Caster: I am the new man on the block at TEA. Since January, we have been pretty actively involved in what we must do and what we should do to meet the needs of handicapped

students in vocational and technical education. We put together a task force several months ago to develop a guide for assessing special education students entering vocational education. We are using the resources available on assessment. In the past several years, the Agency has funded several assessment projects through the Research Coordinating Unit. These projects have done a considerable amount of research. A lot of people have knowledge about assessment, so our task force is trying to pull together all the resources available to come up with items that we all agree are things to be done in placing handicapped students in vocational education. The publication will be out this fall. We have several groups that will be making presentations, and I hope that you will see some commonalities evolve in terms of hardware.

We are committed in the Department of Occupational Education and Technology to providing services to all students. It is our desire to see that all students have the opportunity to gain an education or to be meaningfully employed. Under the new funding pattern, 10% of our money has to be set aside for occupational education of handicapped students. So there is money available. We have the commitment. It is our responsibility to work with school districts and with post-secondary institutions to help them come up with viable options to provide these services.

Parrish: Pam?

Pam: I am Pam Wetzels and I am a parent of two handicapped children. My daughter is in high school and is doing quite well academically. My son is finishing eighth grade and has some learning problems. These are going to be recognized as learning disabilities which will be a factor in vocational assessment and in the work that the school is going to do with him.

So I have been personally interested in this. I do not come as an expert; I have a lot of questions. I am also associated with MIGHT, which is a consumer group of handicapped people and other interested people. I see things from the other end when I see handicapped adults and what they can do and how they manage. Then I see what goes on in the school and some of the problems there. School programs are set up in the same way they have always been, which is not always from the point of view of what makes a handicapped individual operate successfully as an adult in the real world. That particular issue piques my interest.

I am also serving on the board of ARCIL, a MIGHT project, developing a resource center for independent living. This is our first year, so we have a planning grant and we hope to get some money for direct services next year. I have a good many questions on vocational education as it is and as we all hope it might be developed through the new Associate Commissioner.

Parrish: We will let you ask those questions in just a minute, but first let us let Don Partridge give us greeting from special education.

Partridge: First, I would like to say on the part of Pam representing the parent, at Special Education we are glad to have "the other two kids on the block with us." In trying to put things in pespective for today's world, when we talk about the teen-ager who is handicapped, we must remember that we cannot categorize because this represents the talented child who has a speech handicap on one hand all the way to the most severely and profoundly handicapped on the other. Vocational education for the handicapped includes the whole array of services that we have, plus those we have not yet developed.

As far as the special education demand goes, this year we are serving about 335,000 handicapped students aged 3 through 21 in the public school structure. We have about 22,000 personnel in the public schools working with these students. When we look at dimensions of this size, which are a thousand school districts, not only are we looking at implementation of a statewide plan, we are also looking at a human element of increased interaction and diminished attitudinal barriers among the factions involved.

Parrish: When vocational teachers accept a handicapped student into their classroom, what special services are available to help adapt that program for that handicapped student?

Partridge: Let me talk on a theoretical basis because, with 1100 school districts, things will vary from place to place. (1) That teacher would have an IEP which should show the learning styles, the learning needs, and the exemplary program for the youngster for the year. (2) There should be a support staff available, especially a supervisor and an educational diagnostician. (3) There would be special education teachers, ostensibly on that campus, for teacher-to-teacher discussion. (4) There may or may not be an aide in the classroom to work individually with the teacher or the student. (5) Then, as a backup system, there is the array of materials that the school district might have available or even can draw on from the Education Service Center.

Caster: May I speak to that? I think in providing a program for a handicapped student, we are going to have to jog our vision or perhaps change some of our most comfortable thinking. The funding pattern we are working with right now is very different from anything we have ever worked with before. The thrust of this law, and the pattern by which we prepare our application, is that we do not think about programs — we think about students and student needs. In preparing your budget and developing your programs, stay within that application. I think it is very appropriate that we note this departure from what we have done in the past. In searching for a model to follow in placing handicapped students in vocational programs, when we develop an IEP for the student we may find some things dealing with vocational education are not appropriate to the student. Then we will have to develop something else. This is the kind of thing that has started exemplary programs such as computer programming for visually handicapped students. We should determine what programs are appropriate and what students can or cannot handle rather than saying, "Here is a student. Let's put him or her in a program." Instead try to determine what is appropriate for students and then train the students in skills they are capable of handling so they can be productive citizens. We will not be wasting our money and time, and we certainly will not be wasting the time of the student.

I think that the vocational teacher is going to have to be actively involved in the placement of students in vocational programs and be quite open by saying, "I know the limitations of my program. I understand the limitations of the student. Now let's try to find some common ground so that we can, within the framework given, provide a program that is appropriate for the student." This model is very appropriate for preparing students for vocational education.

Parrish: Thank you.

Audience: I know that vocational education is making a move at this time to work with special education; that the marriage is coming. I think one of the best things that could have happened is happening through Consultant Eleanor Mikulin because she really understands both sides. But I am wondering when the information such as you are talking about is really going to get to the schools. The vocational teachers need inservice desperately, they need directives. Directives will have to come before the inservice is going to sink in simply because they have their mind set on what their vocational programs are and what they are for. We are lucky to have a program from the Bureau of Education for the Handicapped,

but many schools do not have anything like that and it is going to be very difficult to make the change.

Caster: Let me respond to that in this way. It would be very nice to sit down and write down directives. However, at this point, I do not know what those directives would be. I do not think Don Partridge knows what those directives would be. I do not think any of us know. I was in one of five pilot schools in San Antonio in 1969 for the Plan A Program, and at that time we did not know what Plan A was going to be like. I still sometimes wonder! So before Bob Caster signs off on some guidelines, I want to be sure that people in the field, particularly the people I am closest to — vocational educators, principals, superintendents, counselors, diagnosticians, parents — understand and say, "We can live with this. We have tried this, and this is what we are trying to do in our exemplary programs."

We are trying some things to find out if they work or do not work in a controlled situation. We are quite interested in what you have to say; in fact, we are quite interested in what everyone has to say. From this, we will sift out the things we think fit and then we can make new course directions.

Audience: Perhaps a good starting point for some of the old-timers that have been in vocational education for some time is to try to reconcile P.L. 94-482 with P.L. 94-142. We have conflicting directions coming into the schools. I am not worried too much about mainstreaming when the teachers come in with an education degree. The thing that is scaring the living daylights out of me is my instructors: a case in point is automobile mechanics. Auto mechanics is very popular with handicapped students and the chances are 90 to one that the individual instructing that class is a high school graduate with probably 20 years in the automotive field. It scares them very much when you say, "This youngster is special education." We send those instructors to the ARD, let them sit in on it, and they come out with eyes as big as buttons saying, "I have got something I do not have any background in." It scares them, and they are hard to find; I do not like to see them scared because we need them.

Partridge: The last instruction that I had on the conflict between 94-482 and 94-142 was that, from the vocational standpoint, the ARD would include a principal, a vocational administrator, a vocational counselor, a diagnostician, and a member from special education. This applied after the student had experienced a similar ARD with special education where they had recommended vocational education. It was a two-step procedure. That is in addition to what we have.

Audience: Along the same lines, I had some concerns with our instructors who have no training at all in special education as opposed to special education teachers who have had intense training in this area and are experts. Most of our industrial instructors come directly out of high school and all of them out of 15 or 20 years in industry, but a lot of them have no experience whatsoever in teaching. They have a real hard time until about the third year when they get around to really doing a good job. Then, it scares them to death when you come in there and say, "Okay, now we are bringing some handicapped students in. You are going to have to give them special attention and we need an individual education plan on them." They do not even know what that is. We really give them a hard time sometimes. I would suggest, maybe even in our summer workshops, some intense inservice training for vocational industrial people, more so than even the co-op people, because these people have had special education students.

Audience: I am one of those high school graduates with six or seven years in industry, going into teaching with no teaching experience, and the teaching of those students is the least of my problems. The problem is the logistics of working in an institution — the political fighting, the lack of backing from our superiors, sometimes the absence of the TEA, or any guidance from the school districts — all kinds of these logistical problems are simple pettiness. I do not think that the problem for these instructors is teaching. That is the easy part. The "higher ups" are where problems come from. The staff directors, the ISD, the Region, all these things are my problems.

Partridge: I would like to hear Pam, as the parent representative, respond to this.

Wetzels: I have concerns on the training end of it. People have asked us in MIGHT to do workshops, working with employers, for example. They are really going to make an effort in such and such an agency or such and such a company to employ the handicapped, and they are flat out scared, just like the people you are talking about. The hardest people to do this with, of course, are mentally retarded people. You can take a blind person, or a person with cerebral palsy, and do a workshop.

My feeling as a parent, when I have seen things work, is to get the people together. It sounds simple, but it often is not simple to manage to do it. You need to get your special education teachers, with their expertise, together with the vocational people. The special education people know nothing about vocational education. I know there must be some exceptions in this room, but many special education teachers have come straight out of the university, or some college, and gone into teaching. Maybe they have taught in three different schools, but what do they know about the kinds of jobs that most of their students are going to have to take? Really, not much. And you cannot blame them. That is natural that they would not.

They do know a lot about what kinds of techniques are going to help these students work. What works with John? How can you help him learn? Maybe he cannot read, but maybe he can learn by looking, and maybe he can learn by using his left foot and nothing else. Maybe he can learn by using a tape recorder. I do not know what other tools. You need to get people together. I think for overcoming the initial barrier, you need to get the students with the instructors. I have felt for a long time that the best education you can give teachers is to just put them in the classroom with lots and lots of special education students of all varieties. Have them at least work as aides and then they will see how this student learns, what he needs, how he is successful. After a few weeks, the student just becomes Johnny, rather than the cerebral palsied kid or the low-level kid. That is Mary, that is Johnny, that is Joe, and that is the whole name of the game. You will do a lot better than with all those fancy devices in the amount of time you have. Get your vocational instructors together with handicapped students and your vocational teachers and instructors together with special education teachers.

So often when people talk about vocational education, they are talking about a student who is 16. When you have a student who, at 16, does not know a nickel from a quarter, is that student ready to go into these courses that you are talking about? What about a student who does not know how to get around town, who does not know how to write things down with a pencil, or with a writing device, or with a tape recorder, or a typewriter? My son is going into the ninth grade, and the first time he saw a typewriter in school was last year. A tape recorder has been a yearly battle. He cannot write more than a sentence in half an hour. Why has the school district been wasting this boy's time all these years with only a handwriting text? I am not saying that he does not need it for occasional purposes, but much earlier he should have been working a tape recorder. My daughter should have learned how to use a tape recorder in school. She needs to learn now how to use two tape recorders. She is going to go to college. How is she going to write papers?

She is going to have to do that on tape. These are the tools that she has needed all along. From the very beginning, schools need to really begin looking at that student, but not predicting what he or she is going to be able to do because with some students you cannot. Consider what kinds of tools they are going to need and not what every student will do with their life. The state guidelines almost say that is what you should be doing. Look at how he or she is going to function in the real world.

Parrish: I think you have hit on it by saying that we need to get together and work together. Last year, we did a research study in Texas in which 22 random schools were selected. Out of that group, we interviewed vocational administrators and teachers and found that 83% had not been involved in the IEP process. Is that a way that we can get together, by being in the IEP process? Or is it better when we are not so knowledgeable, and just decide to work with these students?

Wetzels: I do not know how long IEPs are in most schools, but I am notified that I have 20 minutes and, by gosh, I better do everything for a whole year for a kid in 20 minutes. None of your vocational education teachers can do enough in that 20 minutes. Certainly they need to be there, but they need some additional work with everybody working together.

Audience: We found that our teachers do not have a problem accepting special students. We have problems with the liaison, and with the education of the peer group in accepting the student. The only other concern of our shop teachers seems to be that if they take more than they already have, that they get some help in some of these classes, that they get an aide. Those two things, peer acceptance and getting an aide, are their biggest concerns as they take on more students.

Wetzels: I would like to say something about acceptance. Where my children have had trouble in their classes in school is with the teachers 90% of the time. Does that teacher make a little extra effort and does that teacher really accept that child and want to teach that child? I think what is really peculiar, as you look at it bluntly, is for people to pretend that there is no difference. My children went through a school where that seemed to be the way they operated. Everybody was exactly the same, even if you saw him in his wheelchair with no arms and using his feet to type, he was exactly the same. Give the students a little credit. A young child will stare at a handicapped person and I know virtually none of them mind that; it is good, honest curiosity, so deal with it. I agree with you on your other point that you need extra help with these students. You do need an aide for certain classes.

Audience: I see very little liaison work done between the advocacy organizations and the school districts. There is a certain amount of time that we could be working with students and collecting data and this kind of thing. Is there any liaison going on between the advocacy groups and the school administration?

Bebee: I would first like to make clear that Advocacy Incorporated is an independent agency. We like to work with advocacy groups and parent groups. Our major effort is trying to educate people. We put a tremendous amount of our resources into preparing manuals, booklets, and training materials to use not only with parents but also with educators because we think it is extremely helpful if they are talking to each other, saying the same thing to each other, and understanding the same things. There is a great deal of difficulty with parent groups. Any of you who know anything about the consumer movement know that right now almost all consumer organizations are having terrific internal troubles. Inflation causes these groups to lose membership, people have so many other problems on their mind, it is hard for them to be actively involved in groups. It is hard for people who really care to get good turnout, for example, at parent training sessions. We get frustrated all the time. I have conducted 150 workshops like this myself in a year, and I will go to some place far away and have ten or twelve people there. There is a great deal of difficulty getting parents to respond because of all the other demands on their time.

As an advocacy group, we have worked with 2500 parents in the area of education. We have been involved in less than ten due process hearings because our major effort is to try to get the school districts and the parents working together. We do a terrific amount of inservice with the school districts. We are often perceived as very threatening, but our major effort is to try to get parents and school districts to work together. Then that should leave for due process hearings those questions that cannot be answered because there is a question about what the law really means or what these legal questions are. That is what we think hearings are about. You should not have to go to a due process hearing to have your child evaluated. You should not have to go to a due process hearing to get an IEP written. That is not what due process hearings are about. We try to keep ourselves educated and informed and then try to pass on that knowledge and information to parents. But also we find very, very often in our 2500 contacts from all over the state of Texas that information we give to parents is new to school officials. We send them a manual and say, "Here it is on page 17," and they may take it to their special education director or their teacher and it is the first time that the teachers have seen it. It may be the first time the school official even knew anything about that responsibility or that area. It is not going to be an easily resolved problem, but I think that almost all the consumer groups that I am aware of really are striving hard to try to get this common understanding and common ground of working together because everybody knows that that is the best way to get positive results, However, you will all have to deal with frustration. Parents are already frustrated because they are dealing with having that handicapped child and with having all the other problems and expenses of taking care of that handicapped child.

The Bureau of Education for the Handicapped has some grants out for setting up parent information centers where parents can get information, training, and assistance. I know that there are some people trying to get one for Texas. I do not know if they will be successful or not, but that is a start. It would be statewide, very similar to the kind of thing we are doing.

We try to be reasonable advocates to help parents understand the process going on in the various school districts all over the state. It requires a commitment at an administrative level in each district to understand the needs and the problems that they are going to face, the fact that they may need more shop classes or more typing classes. Parents should at least know that Texas Policy and Procedure and Texas School Law and Public Law 94-142 says they have a right to have an IEP developed for their child to meet their special needs and to have the appropriate courses to provide those needs. They go through that process, they get the IEP written, only to be told that the student is going to have to go on a waiting list. You can imagine the kind of frustration that causes. Local school boards often do not understand the problems you are facing in special education and vocational education, so they are not making the proper allocation of their resources within that district. You have to deal with the educators, but I think you have a responsibility also to educate the decision makers within your district about the kinds of special needs you are facing under these laws, not just federal laws, but state laws also.

I am not telling you it is not going to cost the district, and I am not saying that it is going to be something that will just fall

into place. There are going to have to be some difficult choices made and some planning done in advance to accommodate the needs of those children, but it is the same process you go through with all of your other students. This process should require vocational directors and teachers and superintendents to work with special education teachers to determine who those handicapped youngsters are and say, "How many can we expect? What kind of program will we have to develop? How can we spend the money?" We are not saying that you cannot amend that later on.

Partridge: There is another factor in special education that has not been implemented even though it has been in state policy at least since 1970. As that student completes middle school and gets ready for high school, the ARD committee must draft a plan for four, five, or six years (however many more years of eligibility that student has) and try to make some estimates as to where along the educational continuum this student is. This is an opportunity where perhaps a computer could help make some projections for three and four years on down the road. One thing that we in special education must get much better at is our projection of educational needs.

Audience: We do our ARD's by the birthdate. We try to contact the parent and the vocational people ahead of time when we get ready to have the ARD. It works much better to do it by the birthdate so you are not caught on the last few days of school doing about 50 ARDs all day.

Audience: My concern is in the assessment process. We talked to Dr. Marc Gold about the pegboard test and a manual dexterity test, which we have used, but if students do not pass these, they are not going to be in vocational education. I heard last month that we dropped 10,000 students and there was a suggestion that this was something good, that we are serving 10,000 less. Some students were wrongly labeled mentally retarded so these are not getting any services at all now. Our state does not have anything for them. They are not mentally retarded, but they are academically handicapped, and what I am worried about is that we are going to miss services for these people in vocational education the same way we are missing them in special education. In Texas we have a good program, but we are lacking when it comes to helping all the students that are truly handicapped. With the vocational assessment program we are saying because of a test students can enter a program or, because they cannot pass a test, they cannot enter. I am saying that we have got to serve the needs of the student. If they need help, then why use all these labels?

Wetzels: There are many ways to use so called assessment tools and you are talking about using an assessment tool to keep a student out. You can also use assessment tools to see what he needs. A lot of teachers complain about the amount of paper work and the amount of testing that they have to do and the time that it takes. I can see that that is very hard sometimes. However, I will tell you that I was so delighted that somebody discovered by giving my child a test in sixth grade that he did not know how to tell time. He is an average student, he gets along, he is reading on grade level, but I had long suspected he did not know how to tell time. But it was a little bit of an ego thing and so it was hard to get at. So what do you do? You teach him how to tell time. You can discover students who do not know a lot about money with an assessment. With special education youngsters, it is a major problem because they are not in the community as much as is desirable, especially if they are physically handicapped. You can use assessment that way, too. Once you start teaching, you are going to learn who knows a concept and who does not. Then you go on to the next thing or you keep working on the thing he does not know. On the other hand, as Marc Gold seemed to indicate, you should not completely stop him at some point on something that he is never going to learn. I have a boy who is never going to learn the times tables and I think after eight years it is time for the school to decide how we get around that.

Parrish: Our time is finished now, but if you have questions, please feel free to discuss them with our panel members individually.

MODIFYING PROGRAMS TO ACCOMMODATE THE HANDICAPPED: MATERIALS AND METHODS

JOHN FABAC

As Division Chairman for Industrial Occupations at El Paso Community College, John Fabac has had firsthand experience in accommodating the handicapped in industrial education. In this session he covers important considerations in establishing programs for handicapped students in post-secondary institutions and suggests staff development activities as the first step in specialized program and service implementation.

The first thing that I would like to discuss has to do with certain characteristics of delivery systems or services for handicapped students that seem to have significance in terms of facilitating successful programs and services. I also have with me an inservice package designed for developing a system of identification, assessment and evaluation of special needs learners in vocational education. It was written as a project designed to facilitate programs and services at the post-secondary as well as the secondary level. It is designed to be a very flexible system of inservice that can be used in a number of different circumstances. I will be discussing this as well.

Whether you are operating at the post-secondary level or at the secondary level, there are certain elements of instituting programs and services that you have to address as you are implementing the programs. One of the very first things is the subject of institutional commitment. I have seen programs that have failed simply because once funding was found for the program, and some sort of a pattern for delivering the program was written, no one was linked with the key administrators within the system or there was absolutely no support from the board of trustees to insure that the program succeeded. So one recommendation that I would have before you even approach instituting a broad program or any kind of system for delivering services is to insure that you have the support of somebody within the institution. At this point, of course, I am speaking to the administrators because we as facilitators at the middle-management level really cannot do too much in terms of compelling our superiors to give us that kind of support.

The second element you must address is program administration. Of course that goes hand in hand with the commitment aspect. As I said, you have to have someone working with you in your project to set up your programs or services who will provide you with necessary support. Also you are going to need somebody who will provide a broad array of services to facilitate the success of students in vocational education at the post-secondary level. The success of those services or the success of students utilizing those services is severly limited unless those services are coordinated. We have to select and identify someone to coordinate those services within the institution and the community so our handicapped students can take advantage of the maximum utilization of services that are available.

Another thing that has to be done is an assessment of agencies that provide support within the community, and then you need someone to make sure that all services are marshalled together and then delivered to the students within the institution. All too often, a community college is conscientious enough to come up with some services, but makes the fatal mistake of assuming that if the students need a particular service then they will come and tell what their needs are and the service can be made available to them. But that, in most cases, just does not happen. I do think that as we begin to have more and more handicapped students within our community colleges, we run the risk of that happening more and more because even at this point the students that we have in our community colleges are a very narrowly distributed group of individuals. We have persons (probably Vietnam veterans) who have not had their handicapping condition for very long and have refused to take a passive role in pursuing their education. We have a group of highly tenacious young individuals who are going to achieve success regardless of what you or I do to help or hinder them. But if we do our job right and we start advertising our programs in the community and we start making our programs more appealing then I hope we will get a broader range of individuals into our community colleges, or our high schools. Many students have told me the reason they did not come before was because they did not know that a community college would do these things for them.

Audience: Do you see mentally handicapped students having a role in community colleges? It has been my observation that in post-secondary institutions the services primarily are for physically disabled students. I personally believe that there are a lot of mentally handicapped persons out there for whom appropriate services are not at this time being provided.

Fabac: For many of the schools that I have visited, the logical thing to do if you want to do something for handicapped people is to identify a specific client group and develop a program for them. We have a lot of programs for the deaf and programs for the blind. The funds were there, funds from the state office, from Funds for the Improvement of Post-Secondary Education (FIPSE), even from Gallaudet College for the Deaf. So we were able to get some of these programs on board very quickly. True, we did treat the client groups that have the obvious disabilities, but while that was helpful for those individuals it certainly left a very broad population that was not being served. I think the thing to keep in mind with all programs for specific client groups is that we have to observe the programs as mechanisms by which certain technologies are developed for the purpose of ultimately mainstreaming those

students into the central flow of community college life. Sometimes it takes a special program, for a while at least, to develop that mechanism.

I found that most of the colleges I have visited serve one client group very well. Here is an illustration. In the Southern part of Illinois is a school called John A. Logan, a community college right outside of Carbondale. I do not know how this program got developed but it is a very unique one. There are about nine sheltered care homes within the community and somehow over the years somebody developed a special program for the residents of these homes. They bus in clients from these homes for two different classes, one in the morning and one in the afternoon, in some of their old interim buildings. They assess them to determine what vestigial skills they may still have as a result of their illness, then they put the students into two general ability groups with a staff of three specialists and lab assistants who can provide highly individualized instruction to this specific group. It is not a mainstreaming program but I think it is a program that we could use as a model if we were in a position to institute something like that for serving that specific group.

We have talked about someone to direct programs and services for handicapped students. I found that there was at least one assumption that was made at many community colleges that we really need to devote some attention to if we are looking for someone to perform this necessary function. There is a tendency for community colleges to identify the Health Services Coordinator as the person responsible for coordinating programs and services. Most Health Services Coordinators that I have spoken to have indicated that they really do not think they are the person to do this. They do not think that they are the individuals who can best develop these services and then deliver the services to the students. One of the reasons they mention is the negative connotation Health Services has, relative to ill health. Students do not want to go to their Health Services offices. So once again the services are available, but because of that particular stigma the services are not being delivered to students. Many Health Services Coordinators felt that they were a detriment to providing services and programs.

In one other community college, however, it was a very successful approach. I think the reason that that particular community college was successful in using that strategy was because of the original idea of institutional support. Health Services is not an arm of the institution that typically wields a whole lot of power. If there is somebody in that administrative structure that has concern for the success of those programs and services, then the linkages with the Health Services Office are very strong. The support that is given at this particular institution is very great and as a result the chances of success of delivering those support services was very much increased. I think we have to underscore to our administrators that we must have the necessary support for whatever activities we are going to engage in.

It is a shame that we have not gotten the support earlier from the hearts and minds of our administrators, but it does seem to be coming now from Section 504. I was really surprised to find that the administrators and most of the people involved in developing these programs and services typically said the very same thing that you are thinking: isn't it a shame that it had to come from legislation! The fact is they did not feel bad that the legislation was motivating them. I found that legislatively mandated activities such as the self evaluation and transition plans have begun to have a positive effect on the attitudes of people in the community college structure. The reason I believe that happens is because many of us have been involved with handicapped individuals from a negative perspective — we have been mandated to do this, we have been mandated to that, and we are having to try to teach them things without resources, and that makes it all a negative experience. But along comes the federal government and they say, "Okay, now you have to institute a self-evaluation." Well, most people can identify with that, they can identify with the fact that there is not a ramp, there is not an elevator. We are getting individuals who have not dealt with handicapped individuals before, working together in a new kind of activity that is very positive. And as a result I think we are beginning to see some attitude changes. There have been studies conducted to demonstrate this really does happen. If you have done any reading by any of the dissonance advocates, you will find there is evidence for these very practical new experiences causing attitude change.

What other kinds of activities have been used for helping successful staff development or attitude adjustment sessions within your own institutions? I would like to mention just a few things for you that do not work, that we have had some real negative experiences with. Some concerned individuals, who had the best concerns of handicapped individuals at heart, initially jumped out and said, "Folks, this is the legislation and this is what we have to do," and gave all the legislation right on down the line in a two-hour session. I have a couple of friends up in the city of Chicago who were nearly thrown out of a community college for doing that. The faculty became very hostile and reacted very negatively to that kind of approach. I recommend that you consider something else rather than saturating them with the compliance aspect of why we have to do what the federal government says.

The activities that seem to have worked, at least in these community colleges that I looked at, were experiential activities. For instance, one very successful inservice activity is a Handicapped Awareness Day — getting individuals in a lot of situations where they function with simulated handicapping conditions. The inservice facilitator will come in and sandbag your arms, push you in a wheelchair, tape your fingers together or tie your hands back, and then ask you to perform about 20 different vocational activities with that specific constraint. You can imagine the difficulties with these constraints when performing the activity. So the idea is communicated to the vocational instructor that these folks do have some problems that must be dealt with.

The extra dimension that one facilitator adds is to bring in adaptive devices for everyone of those contraints. The idea that is impressed on these participants is that not only do these individuals have needs but that they can do many activities with the addition of these devices. There are methods that will allow handicapped individuals to succeed in vocational programs.

Another activity that has been very successful has been to use a handicapped individual at your inservice programs. For instance, there was an orthopedically impaired student who was about to come into a machine shop program. The staff wanted somebody in the community who was orthopedically impaired and a successful machinist to come in and demonstrate. They could not find an orthopedically handicapped person but found a blind machinist instead. The whole faculty was totally against this idea of bringing in an orthopedically impaired person, thinking about all the negative things that might happen as a result of this venture and not thinking about the positive things that could be done.

All this blind individual said was, "Lead me to the lathe, lead me to the milling machine, or lead me to the bit, and show me where the stock is." From what I understand this gentleman put on a display that really boggled the participants in that class. He chucked up his materials, put the appropriate bit in the lathe, and turned it down to a specific dimension and did various operations on it — and this man was totally sightless. As

a result, a couple of individuals asked to go to a specific training school where instruction was given on how to deal with the needs of handicapped individuals in a shop environment. So I think that is something that you might want to consider. Again it is a very practical experience that gets people involved in the positive aspects of handicapping conditions.

Another thing that has been very successful is to involve the maintenance and grounds people, lab assistants and paraprofessionals in your inservice activities. There have been a number of devices that have been produced locally for low bucks rather than having to go out and order something that was totally new. One community college got around the elevator problem by simply having a lever device built by the maintenance people to activate the elevator buttons, which were too high to be used by people in a wheelchair. The modification for that would have been several thousand dollars, but by using the maintenance people who had been involved in staff development activities, the problem was overcome. So do not overlook that particular aspect of inservice activity.

Other things that have been used successfully are things that emphasize specific activities, such as Theater for the Deaf and wheelchair basketball. How many of you have ever seen a wheelchair basketball game? This is beginning to be more and more common, but the student input from that was just really surprising and like I said, the main things that they were saying to me was that they felt better about themselves and that they felt better toward their fellow students. So again I think you might want to consider some of these activities, but I encourage you to pursue these activities on an incremental, low-key level. It would be nice if we could change attitudes overnight but I am really convinced that it is not going to happen. So you need to think very seriously about the kinds of activities that you are doing and the time-frame in which we are delivering them to our faculty and staff.

There are two additional things that we have to look at when delivering programs and services to handicapped students. One is the influence that organizations of handicapped students can have on policies and procedures within the community colleges. Two of the colleges I visited that were highly accessible were designed that way to a great extent because of the thrust put forward by an organization of handicapped students at the time the college was built. Moraine Valley, outside of Chicago, is another one that was very highly accessible back in the 70's; one of the reasons was that these students got started with the college back at the interim building, the old metal shed that we see so many times at community colleges. They had given a lot of input to insure that they could have accessibility to the new structure prior to the time that Section 504 hit. Really when you come right down to it, we at the administrative level realize that the real power within the institution lies within the students' hands.

When the students recognize a need for a program, as a group, they can communicate a service need. As individuals, however, they are not only going to not tell us they need a specific service, they may not even tell us about a program that is needed or any other insight that they have unless they can get together as a group and develop some of the social skills that are so necessary to confront a bureaucracy such as a community college. We might not have any difficulty with walking into the Dean's Office or the President's Office and telling people how upset we are because we have many of these socializing skills. But as I said earlier, if we are going to do the job we are supposed to do we have to get out there and get that population that is not part of the community college, the ones who might have those skills.

That reminds me of one of my major points, which relates to the whole identification process. A major aspect of identification is recruitment. Let me emphasize the importance of instructor input on identification. We can come up with agency referrals and other techniques during registration for student self-identification, but there is one individual who is always going to be in touch with that student in terms of seeing his or her needs. That is the instructor. I think that one of the best things that we can do in terms of finding out the student's needs in that first day or two is to have some brief performance sampling activity to see if that student can function with that equipment we are about to put before him. You as the instructors are the ones who are going to catch that and there has to be a system for channeling that back into the identification system. That can also work with disadvantaged students. I have seen some very highly successful activities conducted for determining the needs of disadvantaged individuals. With the instructor's assistance, you can have a very sophisticated identification system, we can know about every handicap that every handicapped student has, and we can offer the assistance necessary.

Right now I think we have the cream of the crop. The schools that I visited claimed that somewhere between ½ percent and 2 percent of the student body was handicapped. Our data tells us that it should be somewhere around 12 percent. I do not suppose that in any of the schools that I visited it came to that much this year. I do not think it is going to change until we get out in the community. Tell your students in programs to go out and tell the people what they have. An orthopedically impaired lady near St. Louis said, "I had no idea that I could succeed." In fact, agencies had told her, "Don't go to community colleges. They have hard technical programs. You can't manage it here." Somehow she got in and she found out that she could succeed there."

So we have to go through the recruitment phase. Another phase that I want to mention is the placement phase. I think the placement phase is grossly overlooked. We have to place the individuals that emerge from our programs because that is the mark of the success in our programs. Our funding is going to depend on it.

Before I close I want to mention two resources. Dr. Tyndall at the University of Wisconsin is putting together a handbook for performing program modifications for vocational education. This is called *A Handbook for Modifying Curriculum for the Handicapped.* The address for ordering this is: Wisconsin Vocational Studies Center, 964 Educational Sciences Building, 1025 West Johnson, University of Wisconsin, Madison, 53706. The phone number is (608) 263-3415. If you have any modifications that have worked for you, please call this group in Wisconsin. This is going to help us tremendously. You can obtain information regarding the Identification and Assessment System from the Publications Clearing House in Macomb, Western Illinois University, Macomb, Illinois.

I thank you for your attention. If there is anything that I can do to give you additional information I would be glad to help.

DEVELOPING SUPPORT SERVICES FOR HANDICAPPED STUDENTS

ANN WILLIAMS LEMKE

Ms. Lemke, presently a counselor at El Paso Community College where she has established the Center for Educational Services for the Handicapped, explains how to establish support services for handicapped students in post-secondary institutions. She describes how to define the population qualified for receiving support services, identify counseling and noncounseling needs for students and provide other support services.

I want to talk about support services for handicapped students in the post-secondary environment. First of all, I will show you a little pie graph indicating the number of handicapped students at our college and their handicapping conditions. You can see that we have a fairly general population of handicapped students. We do not really have a predominance of any one group, although other colleges may specialize in one handicapped area. You will want to look at your own population in terms of how it is graphed because you are going to change your services or adapt your services in proportion to the populations you are serving.

This change happens in one of two ways. One, of course, is if you start getting large numbers in one of the handicapped areas and the other way relates to targeting on one particular group for vocational action. For example, TSTI in Waco and San Antonio Community College have programs training blind computer programmers.

The next point relates to how we document things, forms we use to get more information and to distribute information more equitably. We have forms for the placement center so that they know the roles of the interpreter or reader, an introductory form that we send with the tutor, note-taker or interpreter in the classroom so the interpreter knows the role of this individual and how to get in touch with us. We have, of course, a very detailed tutor schedule and we know exactly who is doing what. We have applications for parking stickers and, of course, student information. It is very important that you provide as much information as you can.

I am going to talk about ten areas that I consider to be very important for college counseling. If you are designated to work with disabled students on your campus or if you are referring students to a college then these are the services that you can expect and activities that you might be involved in.

Area number one: Handicapped students' programs on the college level ought to be involved in identification of handicapped students and recruitment. Identification for what reason? You may have questions from the school administrator: who are these handicapped students and how many do we have? My question is, for what reason do you want this information? Certainly the only reason you ever ought to be soliciting this information is if you intend to provide a service that these students can use or if you intend to help the students have access to a program or service. There is no other real purpose for this information. It should be for the benefit of the student. There are several ways to identify your handicapped population. Most students are not going to come to you, they do not know about your service, so you should use a lot of publicity. You should contact agency people, Texas Rehabilitation Commission, Commission for the Blind, Veterans' Administration, Department of Human Resources, whoever might be referring students to you. Contact high school counselors and handicapped advocacy groups, for people who may want to be coming to college. Get a feeling for who is sending these students or which students are likely to come on their own. You will get students referred who are not particularly connected with any agencies, people who for one reason or another have missed out on the system.

Some other things we do for identification besides the things I have said is that we advertise at registration and through the media. I think that recruitment is very important. It is commonly thought of in terms of other students but not necessarily for handicapped students. Yet if you recruit then you can plan in advance the services you will need, who you will be serving, what they will need. You will offer a great deal more effective services, if you actively recruit. Then you are going to be on top of what you can provide and what other resources may be available. Speaking of resources, in our program we have myself, a lab assistant who is general tutor coordinator and also fills in for tutors, two interpreters, and six other staff people who have a variety of duties, including mobility assistance, reader, and so on. So it is important to recruit and identify students.

Number two is preregistration activities. A number of things that you can do before the student ever enrolls is meet with the students, have the students come to the campus and see what they are getting into, do some vocational counseling, and do some rather intensive orientation to college. College is not high school; there are differences, more responsibilities on the student and so on. The student needs to know what kind of situation he is getting into. This is true for any student but especially for disabled students. Another preregistration activity is actually planning. You want to do as much of this as you can.

Number three is registration. We have to use registration by mail for all of our students and it is a mess, quite frankly. But because we do use the mail registration I have a procedure for placing priorities on students' packets if we are trying to arrange specialized services for them, for instance, transportation. We have a limited number of interpreters and I am sure all of you know about interpreter schedules so there are times when we want to get priorities in registration for handicapped students. It will save a lot of trouble later on. If, for example, you knew that a student was not going to be able to function in a chemistry class then I think you would be somewhat responsible for making the effort to do something about it. Of course at

registration we provide registration assistance. We also do a lot of advertising at this point and find many people. Despite our best efforts they wait until the last minute.

Number four is arranging necessary services and a mechanism for follow-up. You need to identify in advance what services the students might need. Do they need note takers, do they need tutors, readers, so on? It is at this point we actually have to arrange for students to have services and we have to have a request from the student, an indication that they want that service, and that they realize they are also going to have an obligation. How many of you, for example, have provided note takers for deaf sudents and had a case where a student thought, "Oh, great, I have someone to take notes — I do not have to show up for class." There has to be a follow-up mechanism here. The student needs to know that he or she has certain responsibilities in the situation. If the student does not attend class, then that is it for services. So it is important to air these things before you start providing services. The student needs to know what you expect.

Of course you need a procedure for knowing that your service workers are providing satisfactory services. That might mean that a deaf student comes and says, "I cannot work with that interpreter." Then you must make some sort of change. It means that you have to be able to follow up the quality of the services that you are delivering and know whether the students are benefiting.

Number five is identification of equipment and material resources. Even though you may be under the student services division of the occupational education division, or whatever, you are going to get a lot of requests from outside your area, so be aware of what is available. If you do not know, find out how you can get the information. You do have to keep on top of these resources and have a lot, particularly materials resources for faculty and administrators to have access to.

Number six is faculty awareness activities. This is a rather thankless job in terms of getting faculty to participate. Usually it is low priority for faculty, not that they are callous or do not care. There are just a lot of other things going on. But there are many great things you can provide in faculty awareness activities. Not only specific medical and psychological information about the handicapping condition and attitudes toward handicaps and so on, but you want to show that there is a reason for all this attention to handicapped concerns. For example, you want to provide information that shows that handicapped people do get jobs, they are employed and it is not just a game that we are playing to keep a few students off of our back for a few years and that they do not have any future opportunities. You want to give a very positive image of the student and where he is going and what the opportunities are. Also do some disability simulation activities. Faculty awareness can be part of your function.

Number seven is faculty consultation. We had a partially sighted girl in chemistry class and the instructor was naturally a little bit concerned about how she was going to do in the lab. (So was I, but I was not about to let on!) Naturally, faculty are going to have questions about how students will perform in a given situation. You need to be able to provide a resource. In that situation we provided a tutor who worked with the girl and her lab partner for a few weeks until she knew her way around.

Number eight is counseling activities. I do not mean to understate counseling activities. I just feel that they are a part of the overall program. I have a number of activities listed here under counseling. First, academic counseling. This is awfully important. It is very unfair if a student comes to you and says, "I want to go into some particular career," and you say, "Sure, whatever you want to do." You need to be able to assist the student in identifying his or her abilities, what the possibility is of being employed, how to adapt to a particular program you are going into and so on. Vocational counseling, of course, goes along with academic counseling, values clarification, self-concept development, and goal setting. A good example of a package program is the PAST program, Personal Achievement Skills Training, but there are other good ones as well. You really need to have some clarification of their values and they need to know how to solve problems, how to set goals and so on. These people have been sheltered from this part of life and they do not have the skills to meet the world, to make decisions, and deliver consequences of their actions and keep on going. So this is a very important part of services.

Another very important part is assertiveness training. I am sure all of you have had students who needed this kind of counseling. Because of the nature of assertiveness training, the way it usually is taught, it is perfect for working with handicapped students. It involves a lot of role playing and it involves some very specific concepts for most people. And finally, sex education, something that generally is not done. Many of our students have needed this kind of counseling. Either people have had limited social contacts in their adolescence and did not have the knowledge base that other students had or people had been injured and their physical therapists or doctors had not spoken honestly and frankly, about this area. This is an important counseling activity also.

Number nine is to be a resource to cooperative education and placing people on your campus. You know the kinds of adaptations that have to be made for handicapped students; you know the students' particular needs and so on. It is up to you to communicate this information.

Number ten, in summary, is to facilitate access. Do not be a complete barrier between the student and college. Foster advocacy. It is desirable that the student do as much as can be done on his or her own, because if you are the one who always goes to the administration, they will begin to wonder who you are talking about. Who are these people who need these services? Who are the people who, in spite of all you are doing, are still encountering obstacles? Encourage students to be their own advocates!

Those are the ten areas I consider important in a program of support services for handicapped students at the community college.

COMPETENCY-BASED INSTRUCTION AND THE HANDICAPPED STUDENT

JOHN SKINKLE

Post-secondary occupational programs characteristically address student needs on an individual basis. Dr. Skinkle, a professor at Texas A&M University, describes how competency-based programs enhance this posture to maximize capacities for serving handicapped students in post-secondary occupational programs.

I would like to focus this discussion on competency-based occupational programs in terms of what they are, what we might want them to be, and how we might operate them. However, prior to elaborating on those three particular aspects, I want to make a few disclaimers. First, competency-based programs are not a panacea; they will not solve all of your instructional problems. In fact, if they do help to solve some problems, they are probably going to create others, with respect to the time needed to develop instructional materials, professional development of staff, careful monitoring of program operations, recording students' progress, and open-entry/open-exit policies.

Also, it is important to realize that nothing in competency-based education is new. The dimensions of these programs have simply been packaged differently so that educators may more effectively meet the needs of individual students. Therefore, I do not advocate that everyone "jump on a competency-based bandwagon." However, I happen to believe that competency-based programs are particularly appropriate for vocational skill training. Other aspects of the academic curriculum may or may not be adaptable to competency-based education; it is the responsibility of the individual educator to decide. Since I am most familiar with this form of curriculum as related to the skill training aspects of occupational education, my remarks should be subjected to careful scrutiny when attempting to adapt this instructional technique to other sectors of education.

In addition, it is essential to note that competency-based programs are not just for the handicapped, or the special education student. On the other hand, competency-based occupational training programs are particularly effective for serving the unique and individualized needs of handicapped and special education students. In essence, it seems such programs enable professional educators to facilitate student achievement which is often not possible when utilizing a traditional curricular approach.

Finally, it is necessary to consider the term "special education." In this particular instance, I do not want to use it as a reference to only the disadvantaged and the handicapped. Actually, it seems entirely appropriate to consider every individual as a special student; in fact, as an administrator, program coordinator, or curriculum specialist, it is imperative that an educator perceive each person as special.

Consequently, competency-based programs are particularly appropriate for skill training because they enable the practitioner to more effectively serve *individuals* — handicapped or otherwise.

COMPETENCY-BASED EDUCATION: WHAT IS IT?

Competency-based occupational training is primarily concerned with the specific activities which a person performs in a given occupational role. These competencies are initially identified and expressed in terms of what a person should be able to do when employed in a specific job. The word "do" is the critical aspect of competency-based education, at least the skill training aspect of it. (This is why it is sometimes suggested that it may not be particularly appropriate for other sectors of the academic curriculum.) Competency-based vocational programs are unique because the student engages in training which (a) focuses on developing skills which can be *observed* and *measured*, and (b) is evaluated to determine whether or not the student is developing the competencies necessary to be employable.

COMPETENCY-BASED EDUCATION: PROGRAM COMPONENTS

A competency-based vocational education program is initiated by developing an occupational description. To do this properly, it is desirable to use several resources: the Dictionary of Occupational Titles, journals, and task listings are available through curriculum centers. Advisory committees are also very important to competency-based vocational programs because of their capacity to provide insightful, up-to-date, detailed information for program development (e.g. an occupational description) and improvement. With a functioning advisory committee, the previously mentioned resources, and a committed instructional staff, it is possible to develop a comprehensive, realistic description of a particular occupation within a reasonable time frame.

Second, it is necessary to identify the specific competencies associated with a particular occupation. This is accomplished by enumerating those aspects of job performance which are observable and measurable. After developing the initial competency list, it is desirable to update it periodically (i.e. yearly), and to continue the involvement of the advisory committee with the program. If this group meets four times a year, one of the meetings should be devoted to reviewing the competency list to see if there are new technological changes that need to be incorporated within the curriculum. Once the competency list has been developed, at least for a period of time, related competencies should be grouped together in order to realize some structure and organization in terms of the possible

sequence of instruction and the relative difficulty of the competencies to be developed.

Third, it is necessary to engage in program blocking; this is a visual representation of the training to be provided. (In order to understand the concept of blocking, it might be helpful to think of competencies as "units of instructions.") The process is begun by identifying which competencies need to be developed first by students (i.e. what do they need to know first if they are going to develop some of the more sophisticated competencies later?) Generally, easier competencies are developed initially, with more difficult ones being developed later. This has implications for serving the handicapped because the training is usually sequenced so that, when coupled with individualized instruction, the student has the opportunity to achieve his/her maximum potential.

After blocking a program of instruction, a list of tasks to be performed must be developed for each competency. This task list identifies the entry-level skills that individuals should be able to perform once they move into occupational settings. Tasks are the things (the general work activities) that students must perform to achieve a particular competency. They are the actual learning experiences of the student. For instance, if a student is enrolled in a welding program and one of the competencies to be developed is "prepare the torch for welding," then securing the necessary equipment, setting the proper level and mixture of gases, and adjusting the flame are tasks associated with that particular competency.

At this point, the occupational description has been completed and the occupational competencies have been listed; the program has been blocked and task lists have been generated. During the latter phase, it was essential to determine what the student needs "to do" and "to know" with respect to performing these tasks. Subsequently, attention is focused on the general and specific objectives of instruction. General objectives refer to the competencies being developed whereas specific objectives relate directly to the tasks the students perform in their learning experiences. As might be expected, the conditions, level of performance, and standard of acceptable peformance must be established for each program competency.

Once the objectives have been identified, decisions regarding the technique(s) and extent of student evaluation must be made. It is necessary to determine how to assess whether or not students have achieved a particular level of occupational competence. Too often, educators proceed immediately with the development of instructional materials without directing sufficient attention to intent, scope or process of evaluation which is the ultimate measure of student achievement. Fortunately (or unfortunately — as the case may be), instructional staff members working with competency-based systems must know at the outset what criterion standards of performance they are going to measure students against. For instance, a post-secondary student enrolled in a masonry program will have achieved a satisfactory level of peformance with respect to a particular competency if he or she is able to lay a minimum number of bricks on a line within a given time period using specific types of equipment. Once the level and conditions of performance have been established, the evaluation mode and process can be formalized with respect to the use of peformance checklists, multiple-choice exams, or other forms of measurement. Also, once the standards of acceptable performance for each competency have been determined, parameters are defined specific to the methods of individualized instruction and the resource materials to be utilized.

Finally, the instructional staff along with program coordinators (supervisors) can begin developing materials which will be used by students in the learning process. The materials developed for each competency (unit of instruction) are usually referred to as packets or packs. The development of these packs proceeds through several steps, and therefore, demands a substantial commitment of the administrators, supervisors, and instructional staff associated with a particular program. It is absolutely essential that the teaching staff be actively involved in preparing instructional materials for the competency-based system. If materials developed elsewhere are to be incorporated within the program content, instructors must spend substantial time evaluating the documents, resources, and student achievement measures to ensure that the materials have been adapted to their unique competency-based program. It is only through the active participation of the instructional staff in developing the curriculum that a *commitment* to and subsequent *utilization* of materials can be expected.

When preparing instructional packs, introductory materials are presented to define the respective competency to be developed. Next, the pack includes materials which inform the student of the purpose for developing that competency. He or she will learn why it is important to acquire a particular occupational skill. The general performance objectives are then outlined. The students are informed of what they will be able to do once the packet has been completed successfully. Specific performance objectives are then noted in terms of the learning activities students will be engaged in and the resources they will be utilizing.

In addition, it should be noted that a quality resource center is critical to the implementation of a competency-based, individualized system. Without the necessary resources, and without access to these resources, the system will fail.

COMPETENCY-BASED EDUCATION: WHY?

Having previously provided a brief explanation of competency-based education and identified some of the basic program components, it is desirable to consider (1) why such programs should be implemented, and (2) why they should be linked to individualized instruction.

In the traditional curriculum, the time allocated to developing a particular type of skill or academic knowledge base is generally fixed; the content is also fixed. In addition, if one method of instruction is being used for a class of thirty individuals, there is the apparent assumption that everyone learns in the same way — there is a fixed learning style. As a consequence, the educator directs the learning environment as though the students are a homogeneous group.

This approach to public education is contrary to results of research in educational psychology, but it is characteristic of the state-of-the-art in classroom instruction at this particular point in time. However, the implications of accepting this condition as unchangeable are significant. If everything in the curriculum is fixed (time, content, and instructional technique), then the skill attainment levels of the students are going to be variable. In essence, some students are going to perform better than others. True, some students will still perform better than others in competency-based programs; but in the latter case, students will achieve a higher level of knowledge and skill relative to the specific competencies which they *are* capable of developing.

When the entire competency-based vocational education system is individualized, the amount of time the student needs to spend on a given competency is variable. The content within a given area of instruction is also variable because certain types of businesses and industries (represented by membership on the program advisory committee or as a contractor of specific training to be provided by the school) desire certain students — their employees — to cover certain content while others may desire something else. This is not meant to imply that business

and industry strictly control vocational training. It means that part-time students can be served by the system very effectively by focusing their learning experiences on certain aspects of the training program. *The student still has the option of completing the entire program if he or she desires to do so.*

This same system serves the variable learning styles of individual students. It is reasonable under varying circumstances to use printed materials, non-printed (audio-visual) materials, peer group teaching, and/or one-to-one interaction between the learner and instructor when developing various competencies. For example, it seems that the potential of the competency-based system is best characterized by a situation which has actually occurred. In a classroom situation a young Educable Mentally Retarded (EMR) student was working on a lathe developing a certain skill and competency required of a machinist; at the same time, on the other side of the shop, another student, later identified as a college graduate, was developing a different competency on a numerical control machine. Through the flexibility of the competency-based instructional system which had been individualized to the needs of each student, teachers are able to function as managers of the learning environment for students who have the potential of (1) the EMR youth or (2) the graduate of a prestigious higher education institution. Certainly, it was never expected that the EMR student would develop all of the competencies which the other student would, even with an unlimited amount of time; but the potential was there for the former to achieve the highest possible level of skill development of which he was capable.

Another justification for advocating the development of competency-based education programs concerns the concept of articulation. Most educators would probably like, and hope, to achieve effective articulation of their education programs; in fact, competency-based programs facilitate the achievement of this goal. How might this objective be realized? Considering the example noted above, it is evident that people may enter a program at varying levels of competence and continue until they have apparently achieved their ultimate potential or they desire to leave the program to begin working in a particular job. Under such conditions, it is possible to accept high school students regardless of their ability level — before or after graduation — and help them to develop competencies in a specific occupational area which will not only prepare them for the world of work but also afford them the opportunity for further training via an Associate Degree program at a junior-/community college or additional education at a college or university. In addition, it is possible to achieve horizontal articulation. For instance, a competency-based vocational program can be the technical base of an Associate Degree program, or it can serve as the means to illustrate the need for developing certain basic educational skills in the areas of reading, mathematical, and writing, which are generally important to successful participation in an occupation. Also, with the heavy emphasis on evaluation, it is possible for individuals who already have certain competencies to continue with their training without having to waste time by *repeating* learning experiences. The student simply "tests out" of a particular competency and moves on to another.

How does the competency-based vocational education system mesh with the entire curricular effort? Individuals in the system may be secondary students or post-secondary students. They may be handicapped, disadvantaged, or they may be neither; but no one is refused admission to a program of occupational preparation. How is this possible? The important factor is potential. Is there anyone who works with handicapped students who is willing to talk to such a student for a couple of hours either individually or with others and, at the end of those two hours, make a definite decision regarding the ultimate potential of the individual? Would it be possible to know exactly what that individual is going to be able to achieve? Probably not. Fortunately, competency-based systems do not place levels of expectation on students. They simply present the student with a description of what they must do and know to develop certain competencies. The services, resources, and people to be involved in the learning process are also identified. Eventually, it is hoped, the students — who might be handicapped — will be able to perform at such a level that they can become economically self-sufficient.

COMPETENCY-BASED EDUCATION: OPERATIONS

Once the students have entered the system, they participate in a pre-assessment diagnosis. Basically, this process involves considerable testing. All individuals in the school system should be tested in order to determine how their characteristics, interests, and abilities coincide with those required of individuals employed in occupations for which the vocational program is preparatory training. Also, at this point, vocational guidance is extremely important. Competency-based vocational education programs rely on effective guidance because it is critical to identify the services that are needed by a student to ensure the development of their full potential.

During the third stage of program assessment, the individual students would be required to meet with the instructional staff to find out whether they realize what skills and competencies are needed and what their future work environment is going to be like. This helps to determine whether or not the students really have a commitment to that type of occupational training. The individuals are also asked to carefully examine the entire competency list and note which — if not all — competencies they wish to develop. At times, students may wish to develop only a portion of the competencies associated with a program because they have only a limited amount of time to spend in vocational education; possibly they simply do not have the financial resources. Handicapped students may have similar concerns; the quicker they become self-sufficient, the better. In a competency-based program, the students can identify needed competencies, quickly develop them effectively and get a job with an expectation of considerable success. Does that mean the students are "out" of the system once they have left school? In a competency-based program, students may come back six months later and continue their training on a full-time or part-time basis; also, they may leave and re-enter the system as many times as they feel necessary.

Finally, at different times, the students will participate in evaluations to determine how well they can perform certain competencies. At these times, one of several things may happen. First of all, during an evaluation, the instructional staff will diagnose how well the students can perform an occupation-related activity. The instructor may then determine it is necessary for the students to continue their training on that competency. Or students may continue with the development of a new competency. Or, at the end of a particular evaluation phase, it may be time for the individuals to seek employment. Or, the students may decide to continue with advanced training at another institution. Whatever, the students — and others — are reasonably assured of the students' extant capabilities because they have been observed and measured. In addition, there is substantial information which the student and others can use to plan and make decisions about the continuing growth and development of the individual.

CLASSROOM MANAGEMENT IN A VOCATIONAL SETTING

OWEN HILL

For those who want to acquire teaching techniques for working with handicapped students in the vocational classroom, Owen Hill is the man with the answers. Mr. Hill, who has taught VEH General Mechanical Repair for 11 years, discusses the classroom management plan he developed for his Auto Mechanics classes. The U.S. Army provided Mr. Hill's initial instructor training and teaching experience, after which he received certification for teaching VEH, CVAE, and T & I in 1969.

The purpose of my presentation is to give you some theory and ideas on classroom management that I have developed during the eleven years I have been teaching vocational education, and especially vocational education for the handicapped. The standards put out by TEA specify that we have a two-year program. About all we can teach the first year is a little bit about job safety, working safety, a few hand tools that you need in a particular trade, and most important, socialization. We have a hard time trying to teach these students to get along and work with their fellow man. This is one of the major things that we have to program into the student. Then, the second year we start trying to teach them the skills of the particular trade that we happen to be in.

The main problems, as I see them, for this particular VEH program are going to lie with the counselor who is on the ARD committee who wants to get this student into a particular program, and the teacher who has to motivate this student in order to get him or her to learn. We have to insure a selection process for the program so that when a student is selected he or she must benefit from this training. Too many times a student is put into one of these programs because there is a vacancy. Maybe they have a discipline problem at their home school or maybe they are a little hyperactive and they disrupt the instruction in a regular classroom atmosphere, so they have to find a place to put them. Of course, in El Paso we have a unique situation. We have a centrally-located technical center to which all of our students are bussed. We are not a home school as such. They are bussed into us for a three-hour block, then they are bussed back to their home school.

I do not know about the other schools, but having thirteen VEH programs in El Paso, we do have a problem with placement of these students. Too many times we are trying to put a round student into a square hole. We must consider not only the student's desires for a particular program, but his or her ability to function. We go back to one of the requirements for Vocational Education of the Handicapped, and that is a least restrictive environment. If you put students in a particular program and they cannot learn or function, then you have restricted their environment. You must be prepared to do something else. In El Paso we have a Singer-Graflex system that we use in testing these students prior to their coming into our program but it is only an aid. Sometimes a student will check out very well, will want to go, they send him and two weeks later the student wants to move.

This year they developed a system where they bring the eighth and ninth graders into our program to actually watch us in our performance of jobs in the classroom. We give students an explanation of what we do. I think this helps the student make up his mind about what he wants. Too many times we are putting students where they do not belong. In order for the teacher to function properly, he has to motivate students to work and if they are in the wrong place there is not much chance the teacher will be able to motivate them.

BACKGROUND

I remember back in 1969 when I first started to teach in Vocational Education for the Handicapped, we had one of the first programs in the state of Texas that actually was labeled Handicapped Program. At that time I think they called them educable mentally retarded. I was hired two or three days before school started and was taken up to my classroom; it had four walls, a few work stations, but no curriculum, no equipment, no tools. I said, "What do I teach?"

"Anything you want to teach!"

At that time, they had never had an actual class for the VEH in the school system. To find someone who was familiar with it, who knew what to do, was very difficult. I came to work on a Monday morning and they said, "You will only get a few slow learners."

I said, "Well, that should not be too hard because I got most of my instructor training in the army where we had a lot of slow learners. All we had to do was recycle them until they reached the level we wanted."

There I was Monday morning sitting in my classroom, waiting for my students, and here come 21 of them banging on my door. I do not know what the criteria was that they used to select these students, but it must have been one body/one vacancy or vice versa. I almost walked out. It was the most horrible feeling I ever had.

We did not have any curriculum; we did not have any equipment. So I brought my own tools in, and started staying up until midnight or later trying to write a curriculum to meet these students' needs. We worked on my mother-in-law's lawn mower, which we demolished in the first week, but we did get off to a start.

Since then I have learned to love teaching these students. They are so easily molded if you go about it the right way. In El Paso we started with two programs, one for boys, and one for the girls. Today we have 13 and they are all co-educational. I have a girl in my General Mechanical Repair class. She is doing real well. I think maybe if we would intermix the students,

anytime a boy with all his macho, saw a girl getting ahead of him he might work a little harder. It might be a good motivating factor.

THE EL PASO PROGRAM

We have become very large in El Paso; we are serving 350 students a year. They have authorized a VEH counselor for the first time this year. Instead of utilizing a regular vocational counselor, who had his hands full, we now have our own counselor.

Audience: You have 13 VEH programs at the central technical school?

Hill: Yes, ma'am. We have 11 at the central technical school and we have two in the outlying schools.

Audience: Then when you are talking about 350 students that are in the VEH program, you also have students who are mainstreamed into the regular vocational program?

Hill: Yes. About 5% of our students will be mainstreamed back into the regular program.

Audience: Are you serving other students in vocational education besides these 350 students?

Hill: Oh, yes. We have our regular CVAE programs and we have a regular Trades and Industries program. They are not all located at the central school, though. They are throughout the schools.

Audience: How many students all together are being served in vocational education?

Hill: Well, at the Technical Center, we are talking about 5% of the total population of the school district being served in vocational education; be it T&I, CVAE or VEH. Then I include homemaking and things of that nature. When I say 350 for VEH alone, we may have a lot of students who come in and stay with us two months and move or drop and we get another student to replace them.

Audience: Do you feel that the number of VEH units that you have are adequate to meet the needs of the students that need vocational training?

Hill: No, ma'am. No way. And we need more varied programs. I think we need an assessment of the locality we are in to see if we are producing the student that is needed.

Audience: How many students do you have per shop class?

Hill: Fifteen.

Audience: Per three-hour session?

Hill: Yes, sir. Each of our 13 programs serves 15 students per class session, with an aide. In some instances, such as mine, I have a Spanish-speaking aide who can interpret for me so that we do not have a language barrier. The other teachers are able to converse in Spanish so there is no problem.

Audience: Isn't 15 per class quite a few?

Hill: Yes. We had a little controversy over that last year. We had the CETA director here and he told me the same thing. I said you better talk to our director because they throw 15 and sometimes 16 and 17 students in our program at one time. And it is hard to function when you consider how much space you should have for each student. In most instances our shops are set up so that we have a classroom right inside of our working area. And we have to pick up the chairs and move them in order to have work space.

Audience: How do your shop teachers have time then to coordinate and plan for a particular student if they have six sessions?

Hill: We only have two three-hour blocks of instruction.

Audience: Each shop teacher?

Hill: Yes.

Audience: When do teachers have time to plan and coordinate?

Hill: When they go home at night. We have no conference period, we have no preparation period. We do that on our own. The teachers in the VEH program at El Paso have discussed this program and how many students we have in our classes and we agree that we do not have the facilities for the amount of students. That is why I say we need more programs and we need more varied programs.

Audience: Do you need more VEH programs or do you need more different kinds of services?

Hill: Probably different types of services. We are looking at a lower type of student, mentally. Used to be that we would run about 50% LD students; we are dropping, which means we have to change our curriculum. We do not know what we are going to do with the LD students. They are going to be phased out completely from our program and we will only get the physically or mentally handicapped student. This is going to make it difficult. I was talking to Dr. Hull last night and he says Vermont has come up with a solution where they furnish an aide with the regular vocational program and then a student with just a learning disability can go into the regular vocational program and function because the aide is there for the different learner. I proposed this to my boss about six years ago and he said forget it. But I think that would be a step in the right direction.

Audience: Do you think that the excess funds under the new federal guidelines would be a possible source for aides?

Hill: Very definitely. They say they are supposed to put out 10% of the funds for the special education program. I think they have a lot of money left over which could be utilized for this, but that is conjecture on my part.

Audience: I would like to make a comment here, back to the aide situation. If this is going to be a solution, we are definitely going to have to raise the qualifications for aides. We are entrusting them with the instruction and so forth.

Audience: I agree. If we are saying that we are going to use aides for special education students those aides are going to have to know a lot about special education.

Hill: Some of the educational institutions have a program for certification of aides now. I think the aides are going to have to be certified to make sure they meet certain standards. Otherwise, we are just going to pick somebody off the street, plug them in there and expect them to perform and they cannot. This has been my contention about a VEH teacher. Lately they have developed programs for VEH teachers, but they are still pulled out of a particular trade and thrown into a classroom with an emergency teaching certificate. They have no background with special education students or their problems.

MANAGEMENT

I think the word I would like to use for a functional VEH program here is the word "control." Number one, you have to control your physical facilities and development. Number two, you have to control the curriculum development to meet the needs of the student. And number three, you have to control the students in order to get them to learn. I say control because if you do not program these students, they are not going to learn. You cannot put them into a normal situation like you can all the other students and expect them to learn.

FACILITIES

In control of the physical facilities, I design my classroom

with the work stations all around the outside so I can see all my students at all times. Some of these students can become frustrated, so we do what I call production work. I bring projects from the outside and then we actually work on them. The students get frustrated; they might take a hammer to a piece of equipment, so they have to be under observation at all times.

I developed my classroom so that I would have easy access to my tool room — these students have to have tools to work with. I use a lot of signs and pictures on my walls, because I am a firm believer that everything has to be in sight. If one student asks a question about one picture or one sign that I have on the wall, I figure they are worthwhile. It also serves a second purpose in that it reminds me of what I have to teach these students. There are about 14 different levels at all times for these students.

Audience: Do you use a lot of hands-on experience or do you rely a lot on reading materials?

Hill: Almost everything is a demonstration and a hands-on learning situation.

Audience: What type of testing do you do?

Hill: I only have two written tests. Most of these students cannot learn past the third or fourth grade levels. When I have a written test, I make it true-false or multiple choice. I display it on a screen or an overhead projector and I read the question to them and I read the answers. This gives them a little time to think about the question rather than to read all of the words. All of the other examinations or tests that I give the students are practical examinations. I tell the student, "Now this is not to make you look dumb. I want to see how much you have learned so that if you do not know enough about a particular thing we can go back and teach it again."

The checklist that I use to grade the level of competency is in my mind. I do not have it in writing. I think some teachers do have, but I do not. The examination is just to double-check myself because I know how well that student performs in my class. I had to develop part of my classrooom for the handicapped. Now when I talk about a classroom, I am not talking about a classroom like this room. My classroom is actually the workshop. I have done away with the tables and tablet-armed chairs; all we have are 16 chairs sitting in the middle of the floor. After each lecture, we pick up the chairs, put them away, and then we have that additional space. All of the instruction is taking place right in the classroom. Then they are familiar with everything we are talking about. Whereas, if you had a separate classroom, when they looked around, all they would see would be blank walls. I broke an engine down, put it on plywood, and put it right up on the wall. When they are sitting down and I am giving them instruction, they can see every part that I am talking about. I also use slides.

Audience: Do you think you would have much difficulty accommodating a blind student?

Hill: I do not believe so. I would have to have hands-on instruction, but I do not think I would have to change my instruction that much.

Audience: What do you mean by handicapped?

Hill: That covers almost all handicapping conditions. We have emotionally disturbed, educable mentally retarded, brain damaged, and we do have the physically handicapped. I had a multiple sclerosis student who had very little control in the left hand and could hardly walk. They wanted me to teach him general mechanical repair and he did real well. On the outside patio, where we start our machines (to avoid carbon monoxide in the classroom) we have a little step up. I built a wooden ramp out there and it worked okay, but to improve it I got some concrete and poured a ramp right there in that main building. My principal almost had a fit! Once it was down, though, there was not much he could say, and it helped the student. Now for blind students, I think that once they knew their way around, there would not be any problem. Their senses are better than ours.

In my tool room I have what we call a shadow board system. I have designed my tool room so that at the beginning of each period a student goes to the tool room, receives a little key ring with five tags, each with his number on it. Anytime he wants a tool he goes to the toolman, gives the toolman a tag, the toolman gives him the tool and hangs the tag right there on the shadow board. This way we have tool control. In eleven years I have lost less than $50 worth of tools.

I also have what we call a duty board and the duties change daily. I used to have it for a week. I was having problems, though, because a student would go into the tool room for a whole week and would forget all about the equipment he was working on by the end of the week. So I change the duties daily. One student is assigned in the tool room. I also have a shop foreman, a safety officer, fire marshall, and two sweepers. The shop foreman's job is to insure that all these people do their job.

Audience: Are these second-year students?

Hill: No, ma'am. When they come to us in the beginning of the school year we have a little orientation and then about three weeks of safety instruction. We actually study fires and fire hazards. Right in my classroom I build a gasoline fire. Then we go through the demonstration of how to use the fire extinguishers and students themselves use them. I go around to most of the programs and put on a fire demonstration. I have a thirty-gallon can that I take the lid off of and lay on the floor. Then I put a little can of gas in it and demonstrate what happens when you try to put a gasoline fire out with water — it just splashes all over everything. I go through this every year and it really helps them. I teach them how to use a fire extinguisher and how to put out a fire.

Audience: Do you have a summer program?

Hill: About five programs were operational during the summer months, but there was a transportation problem because the district did not have enough money to bus the students. It was the parents' responsibility to get them to this program and it did not work out too well. They could have let the students gather at their home schools and then bus them into us and it would have been much better.

CURRICULUM

To control your curriculum you are going to have to develop it so that each student has a successful completion task. You are going to have to do this to build their ego, and to build their self-confidence. We are trying to build a work attitude into these students. If they can find something that they can do and do well, they are not going to mind the work. You have to give them successful completion of tasks and increase the difficulty of the task as they progress so that they can realize that they are actually accomplishing something.

THE STUDENT

The third factor is controlling the students. I remember my grandmother saying, "Idle hands breed the devil." To control the students, you have to keep them busy. It takes only one student to disrupt a complete instructional program, as you all know. After all, they are sending students to your VEH program because the students disrupted the regular instructional program. When you give this student a job to do, then you have to insure that there is sufficient material on hand for this student to complete that job.

You have to insure that each task or job that you give this

student has sufficient technical knowledge to challenge the student. These students become bored very easily and once they have learned something, they want to go on to bigger and better things. You have to design your instruction so that you can challenge the students at every job. It gets to be quite a task. You have to make sure that each student is aware of the importance of the job that he or she is given. If they feel that the job is not important in the total process, then they do not want to do it. You have to make sure that the jobs seem important, no matter how trivial they are.

I have what I call a list of related activities. Students get tired of doing one thing all the time so we have to have some related activities for them to do, to keep them from getting bored and frustrated. I watch the students, I do not wait for them to come to me. I may say, "How would you like to do something else today?" or if they are getting bored I say, "Boy, you go ahead and finish this job and tomorrow I will let you do something different."

Audience: Do you use any kind of reward system?

Hill: No, ma'am. No special reward system. I say, "If you will complete this I will let you do something else tomorrow," because they will be bored only about one day. In every general mechanical shop, you have a welding set. This fascinates these students and they can take little pieces of welding rod and make all kinds of characters and things. They enjoy doing that and this is a related activity.

Audience: So your related activities are very much a part of what you are after?

Hill: Definitely. It has to be something that you would normally do during the process of the general mechanical repair. By the end of one year most (75%) of my students are able to take a small engine apart, put it back together, and make it run. I think that is an accomplishment. I call it general mechanical repair, but we do have small appliance repair. I put the appliance up on the workbench and we go through a sequence to check the different parts out. They come out pretty good.

Well, I think we have just about run out of time, but I have one more thing that I want to talk about. You see a lot of people today designate their philosophy of their program with acronyms. I have done that with my program and decided to call it MORE. Why MORE? Because you have to give more of yourself to teach the VEH student and the VEH student must learn more in order to go to work. The M, of course, is for *Motivation*. You are going to have to motivate students to learn. You are going to have to *Organize* your classroom and your curriculum to help these students. You are going to have to *Relate* to these students. If the students cannot relate to the teacher, then they are not going to learn. You have to relate to them in their own language. You have to build trust and let the students build trust in you in order to relate to them. The E is for *Evaluation*. You have to evaluate your program. Is it meeting the needs of your students? Are you going to have to change some of your instructional techniques to get the student to learn? And what about yourself? You have to evaluate yourself.

I challenge all of you to see in these students their many possibilities, their great potential. I challenge you to guide these students to grasp those possibilities.

HOW TO ENCOURAGE SAFETY

LARRY JEFFUS

Safety is a popular concern in occupational programs. Larry Jeffus, with over ten years teaching experience and seven years industrial welding experience, speaks on how to handle safety considerations positively, helping deaf, visually, and/or mobility impaired students to understand "whys" as opposed to "why nots." He also discusses safety adaptation and testing.

The initial introduction between you and your potential student is extremely important. If at all possible, when you have handicapped students coming into your vocational program, meet the student ahead of time. Spend some time with the students, get to know them. They have a lot of apprehensions about what is going to happen, what the class is going to be like. Quite often, especially with the deaf students, they are isolated from the regular student body, and if deaf students have not been in vocational programs, they really do not know what is going on in your program. It is not as though they could sit down with a cup of coffee and a friend and say, "Hey, tell me about the welding program." Nor can they pick up information by standing near someone in a crowd. They have to be told everything or taught everything they learn. Students with other handicaps will have some of the same apprehensions and feelings, so the instructor should meet with these students before the course starts.

The first thing that you should do in any program is establish some ground rules for safety. I have written a text, *Safety for Welders*, published by Delmar, and I use it in my program. These short pamphlets or books are available from Delmar in a number of areas — sheet metal and air conditioning and several other areas — written strictly for safety.

I always try to use a positive approach to safety. In welding, for example, if you tell a student that he should wear all-leather, high-top shoes, and he comes in with a pair of high-topped thongs, has he done what you told him to? He has; his shoes are all-leather and high-topped. You did not tell him that they had to have rounded toes and could not have open sides. Students will do that to you, if you tell them exactly what you want. You might say, "Do not wear sandals, do not wear canvas shoes, do not wear open-toed shoes." Then they will come in with something you forgot to tell them not to wear. So be positive, tell them everything that you want them to do. You may feel it is common sense that in certain situations you do a certain thing, but if you have not told them what you expect,

new students will not know. A handicapped student who has had little or no vocational experience is even more apt to do something which you feel is totally irrational. But remember, to them it looks logical.

You can approach safety in a positive manner, but it takes a lot of extra effort. It is easier to say, "Do not do this and do not do that," than it is to say, "Do it this way." Delmar books are all positive. I think there is only one negative statement in my book and it was in one particular safety point: acetylene pressure is never used over 15 pounds. That is absolute. Everything else in the book was written positively; it took a lot of time, a lot of extra effort, but instructors need to do the same with their safety instruction.

Now, after you have gone through the safety instruction give your students a test. I have a one-hundred-question test that I require my students to take. They must get every question correct, 100% accuracy. How often have we taken a test and remembered only the answers we got wrong? We forget who discovered America, but we know the date because we missed that question. Testing is a very good learning situation and I use the safety test as a learning tool. Students take the test and if they miss a question, they retake the test until they have 100% accuracy. It helps the student.

It is also good for liability purposes; it gives you documentation that the student had all the answers correct. If at any time in the future a question on safety comes up and for some reason it winds up in court, you have something concrete that lawyers can use. It will have the student's signature and the right answers.

"Did they tell you to wear high-topped shoes?"

"Yes."

"Did you take a test?"

"Yes, but I cheated; I did not remember that."

"Whose fault is that, yours or theirs?"

Either way it is an edge against accidents. As you are aware, there are law suits coming up constantly against institutions and teachers and administrators of programs.

Include in your demonstrations what it feels like, smells like, looks like, and sounds like when the process goes wrong. You can tell when a lathe is bogging down by the sound. You know when the tool bit is likely to break off, or when the drill bit is going to catch. You can tell by the sound, you can tell by the amount of smoke billowing off from the drill bit that it is starting to overheat, and something is going to happen. You can tell by the hissing sound of an acetylene torch when it is about to pop. Have you ever taken a lathe, cranked it in and gotten a heavier and heavier cut? Just before it goes, you may feel some chatter and vibration or a heavy definite increase in sensation. Tell your students that. Tell your students that they do not have to hear something, they may be able to feel it. Tell blind students that there is a certain smell of the oil as it starts to burn before the bit overheats. Tell them if they get a whiff of that to lighten up, reduce the RPMs, change the speed, decrease the feed. Likewise if you are feeding the drill bit too slowly, you can get a chatter. The chatter you have from feeding too fast is very fine. Include sensory clues with all of your students, and specifically your students who have a handicap.

For those particular students, you may also crank the feed in just a little too heavily, and then let them feel it. Light the acetylene torch incorrectly and let them hear it. Smoke a little oil and let them smell it, so they know what it is, what it smells like. You might tell them ahead of time, "You are going to have this strong smell of burning oil. Tell me when you smell it." For those of you who have worked with cars, you know what rear end grease smells like, you can recognize it in a second. It is a very pungent odor. It looks like oil, but there is no doubt if you put your finger in underneath the car and smell it. You can identify it immediately as grease. But to a student it is just stinking oil. Burning oil on a bit or smoking torches have very distinct smells. Tell your students about them.

Any shop changes to help students with their specific handicap or help them to understand how to do something should be very limited. I have worked in rehabilitation centers where so much time and effort has been spent organizing things and putting things together for students that it actually became restrictive. They were unemployable because it would have taken twice the area for that student to set up in as for any other employee to set up in. If you have worked in industry, you have heard that the safety equipment is what is going to get you. In a lot of cases that is right. Too much safety equipment makes the operator relax, become docile, or not pay attention, and then something gets him. So do not try to overguard, overprotect, and overisolate problems. Do not change the work situation beyond that of the regular worker more than you have to.

I spent some time at the Perkins School for the Blind in Watertown, Massachusetts. We were having students produce a finished product in a sheltered workshop situation. I found that I had to try myself what the students would experience, otherwise I would not know exactly what the students would need. So do it yourself, with somebody watching you. If it is the first time you have had a deaf student into your machine shop, run the lathe with earplugs. You are very used to hearing the sound of the motor groan as you start to cut. Look, instead, for what you can see in that situation, and then pass that along to the student.

Keep to a minimum any devices that are needed, and make them as flexible as possible. In Watertown instead of extra guards on the blade, we had clamps on the table that the student located. The student put one hand against the clamp, pushed the wood to that point and never went beyond it. Had he gone beyond that, he could have had an accident. The clamps that we put on the table were minimal, did not interfere with other workers, and so were ideal in that situation. Anything more elaborate would not be available in industry. You need to design that flexibility and freedom into your safety apparatus and devices.

Be realistic. It is easy for an instructor who has a handicapped student for the first time to say, "Gosh, he has a little limp and what is going to happen? Is he going to come along with his cane and bump a student who will fall back and knock another student into a machine, who will hurl something across the room and wipe out somebody else, who will. . .?" and on and on. In your mind you can build up these catastrophic disasters that might happen as soon as the student even walks through the door. They do not happen. Handicapped students are aware of their limitations. I am not saying that they will not be hurt. I have had some students who have been injured before; but realistically, have we not had able-bodied students who have been injured in shop? What is the difference? There are certain restraints that you can set up, but you can only go so far.

In welding, I have students that are burnt all the time from small hot sparks that land on their arms. If you have welded or worked with hot metal you know it is a constant hazard. So why should we try to dress the handicapped student in all-leather clothes so he does not get burned? Is he any different, really, from the rest of the students? Does it hurt him any more or less to have a hot spark bounce on him? If he is in a wheelchair and has very poor circulation in his lower extremities, that may be a problem because sores can be extremely slow in healing; but otherwise we should not overemphasize or overprotect.

Nor should we dwell on catastrophic accidents or disasters that can happen. The welding shop is probably the easiest place in school to start something that can completely destroy the shop and the school and most of the surrounding countryside. An acetylene cylinder has enough explosive capacity in one cylinder to take most of this building off the map. It happens from time to time in businesses or companies but you never hear much about it because the people who are around it do not survive to tell the story. Some administrators become very concerned about this. Once I had an administrator at a demonstration when I exploded a small amount of acetylene and oxygen in an eight-ounce cup. He got up and left because he had never been around this before and was a little too nervous to stay.

Even with these hazardous situations I have had very few problems. The only handicap that I have found extremely restrictive in welding is blindness or partial sight. Welding is a visual process; very few sounds change in the actual welding. In gas welding, you cannot tell when the torch is too close or too far away by the sound.

Audience: What about arc welding?

Jeffus: The same thing is true. You can set up some joints for the visually impaired student, but their employability afterwards is questionable. Students with tunnel vision will have no particular problem as long as they can see enough to identify that very small arc zone. When welding you have tunnel vision anyway, once you put a helmet on. Vision will be limited to the size of a silver dollar or less, so these students are no more restricted than you are. But if they are totally blind or have very poor vision, they will have problems.

For a long time there has been a story that welding hurts your eyes. This is untrue. Infrared light may burn you, but you have to hold your hand in front of it for a long time to let it burn you and it is very painful. The bright visible light, of course, is not a problem because you have tinted lenses that will protect you. Ultraviolet light is the only harmful light, and it is out of the light spectrum. It may work its way through a helmet undetected whether you are sighted, partially sighted, or blind. It is out of the visual spectrum as well; no one can see it. Ultraviolet light is what causes sunburn. If you have that kind of burn in your eye, it can be extremely painful and I recommend that you go to a doctor, an optometrist, or an eye surgeon. Any questions?

Audience: I would be interested in hearing what attitude changing techniques, staff development techniques, or associated experiences you have had in your area.

Jeffus: The biggest thing you can do to change attitudes is to show case histories of successful people in the trade areas.

Audience: People who are employed?

Jeffus: Yes. We have an auto mechanics instructor who said, "You cannot make it if you are blind. I have had several partially sighted students or blind students in my class, and none of them made it. It cannot be done." So I took him some articles that showed a blind Volkswagon mechanic in Watertown, Massachusetts, who has won several awards from Volkswagon for being a top mechanic, but who cannot see anything; no light at all.

People generalize! "If one deaf student cannot do it, all deaf students cannot do it." Or they think that wheelchairs determine the people in them. But even if they are all in wheelchairs, they are not all the same people. Everybody is a little different.

A case history or a success story is a good way to change attitudes. Still, a lot of times it may take a little push from the administration. The administration may say, "You will take these people in, and you will work with them." I have known teachers diametrically opposed to it who have been forced to take in a handicapped student. Students who had the aptitude and ability and success changed the teachers' minds.

One thing you have to be careful with is an instructor who feels sorry for the "poor child." Often this teacher cannot step back and say, "That is dangerous, he can get hurt, but he is going to learn it anyway."

I am not saying that accidents will not happen; I am not saying that handicapped students are going to be totally free from hazards. But are they any more likely to have a problem than any other student? You can read in teachers' journals of the same thing happening with these machines with normal, able-bodied students.

Audience: I am a VEH teacher and TEA requires all vocational teachers to administer a safety course, give a test, and have 100% correct answers. Probably only three of my students can read and write, so I give the test orally. How can I have any record of this if they cannot write?

Jeffus: I would not be worried about it unless I were taken to court. Then you need a copy of the test, so you might record your instructions on tape, have the students answer the questions on tape, and then keep it on file. You need to keep it about five to seven years. Lawyers originally said five years, but now they are coming back with as much as seven years. No one can go past seven years to contest the records.

Audience: Have you seen any texts specifically directed at teaching the special needs students in the shop area?

Jeffus: No. The market area in the past has been very limited. Right now without a federal grant for support it would be difficult to find a publisher for something like that. After going through displays, however, and finding a number of things that are oriented specifically to our populations, I would say that someone could now write a text, and have some success with it. It would be a good idea.

Audience: Have you come up with any specific adaptive devices for your welding program that you might want to pass on to us?

Jeffus: Yes. One problem you have with a lot of the handicapped is hand stability. I have all my students, both handicapped and non-handicapped, hold a welding rod out at arms length and watch its movement. Everybody has kind of a natural tremor; if you hold something as steady as you can, it moves a little. A welding rod is very flexible and the end of it will move, either up and down, in a circle, a semicircle or however, according to your natural body movement.

The other thing I have done is weld with a small piece of tungsten from a Tig welder on the side of a gas blowing torch. I had a partially sighted student who had a depth perception problem. He could see, but only out of one eye at a time. He could not focus both eyes, so he had no depth perception. What I did was weld a piece of silver solder and a piece of tungsten on the side of the torch so it extended just slightly beyond the end. Now when he welds, he just uses that as a reference point. He touches it without getting too close. Everytime he comes around, he just bumps it, and that gives him his height. That is something he can do anytime, anywhere. Because of his depth perception he has a hard time following a line running horizontal to his body. Perpendicular from his body, however, there is no problem, because he can see from that point whether he is either on or off the line. Now he sets up so that he welds straight toward you, not sideways. It was a minor change, which did not change anything except improve his perception. Giving them a reference point is important.

I found that the student who had a problem following the joint, could lay his hand down, leather apron and glove, and

weld next to it without getting too hot or uncomfortable. It helped stabilize his position and avoid some erroneous movements that he had.

There are also adaptive devices for people who cut poorly. You can buy a set of training wheels that go on a cutting torch. They make a smooth cut that looks like a band saw cut. Furthermore, these are industrially available. With the device for cutting circles, you put the torch in a center point and then just move the torch around so it makes a perfectly round circle. If you have a student who has a problem with size and shape discrimination these will help.

Audience: What do you do to relieve their apprehensions and fears about what goes on in the shop? Do you start with competency-building activities, then move on to the more general welding operations, or do you throw them into the mainstream of activities right away?

Jeffus: I usually meet with them ahead of time and we talk. I go through a tour of the shop and show them what everything is and how it works, where the safety devices are, and about any problems, downplaying the hazards. With non-handicapped students you need to occasionally emphasize hazards to get their attention. Once you have their attention, you can go on from there. Handicapped students are apprehensive enough; you do not have to build apprehension to add to the safety margin, you need to tone it down.

There are a lot of things that you could do for your able-bodied students to put in this little edge of apprehension. For example, I explode an acetylene cup to show how dangerous it is. But I tell my handicapped students ahead of time what is going to happen, what it is going to look like, what it is going to sound like, and realistic facts about it. I tell my regular students, "That was not an explosion, that was a pop. If the cylinder went off, then you would have an explosion." But I tell my handicapped students, "Between you and that acetylene tank in this shop, there are safety devices to assure you that it does not explode. In the learning process, do not be worried, do not be afraid of it, become comfortable with it. There are things, all of which are 100% foolproof, between where you are standing right now and the possibility of that thing exploding." That relieves them a lot. I do not stress this heavily with my able-bodied students because I like a little apprehension.

Generally, though, safety precautions for handicapped students are not much different from those for the non-handicapped. Handicapped students should not be catered to so much that they lose their employability. They just need to be steadied and reassured. If you give them support, they will give you results.

TEACHING EMOTIONALLY DISTURBED STUDENTS

HARRY GOETTE, JOHN DEUPREE, DALE VOORHES

In this extremely practical session, three educators from South Texas High School cover general characteristics of emotionally disturbed students, strategies for helping students deal with these characteristics, and specific methods for adapting class structure, curriculum, and managing behavior. They also discuss specialized programs for handicapped students.

Voorhes: In our secondary special education school we serve the deaf, the visually impaired and some multihandicapped kids. All of the students come to us from other independent school districts on referral through the ARD process. We are considered by these schools to be the least restrictive alternative environment for these students. Our programs are regular special education and encompass most of the handicapping conditions. We have a basic academic section which takes about half the students' day and then vocational education for the handicapped which is the other half day. The majority of the students are in this instructional arrangement, but we do have a self-contained unit on one campus that houses students who need a tighter structure, and we have a residential program on one campus for students who are essentially emotionally disturbed. These students usually come from the three-county area, but some come from other areas across the state.

About 85 or 90 of our students are in the more severely retarded range and are housed in what we call the Training Center. The students at the Training Center spend part of the day in vocational and pre-vocational orientation and some are actually working on contract, earning money within the school training program. Part of their day is spent learning better daily living skills, and part is spent learning basic academics.

The topic we were asked to address was the emotionally disturbed. We found, in dealing with these students, that they have several characteristics. As a group, they cannot handle stress well. They have a tendency to "blow-up" at you. They do not talk appropriately; they say bad things sometimes. They do things that we consider unacceptable. You will find most of them have a very poor image of themselves; they just do not feel good about themselves. Many of them have come from homes and environments that are very poor and deprived emotionally. They have short attention spans and cannot stay on a single task for a long time, but we accommodate this by having shorter class periods and diversified teaching. All of them are characterized by "acting out" behavior. They come in, slam doors, kick chairs and say four-letter words.

As a teacher, you have to target on behavior that concerns you the most. If they say a four-letter word, but they got there

on time and are halfway receptive, maybe that four-letter word is not important at the moment. You need to keep a priority for your instruction. You cannot do a total fix on these kids at one time. You have to decide what you want to do first and extinguish the behavior that is the least acceptable and then reestablish priorities as the child progresses.

All of these kids are characterized by hostility. Even if it is not showing up overtly, it is there. By the time we get them most have had years of frustration and failure. They are convinced that adults are crazy and in many cases are right. Most have had several years of very negative educational background and have been told, in a lot of ways, that they are not accepted and are not okay. Also, they often operate in a different time frame. These students need immediate gratification, and some demand it. You must deal with these students, either on your terms or theirs; but you cannot ignore them. Another may be withdrawn — sitting there like a time bomb. He is just as disturbed, and maybe even more disturbed, so you need to be aware of the one who just sits there with a bland expression. This child can be even more devastating than the one who slams the door, kicks the chair and says the four-letter word.

If punishment is called for it needs to be taken care of immediately. You cannot wait five minutes and then say "because you slammed the door," or "because you said the four-letter word, this is what is going to happen." You lose your effectiveness. We need to be fair and very consistent as well. Students need to know that when they walk in the door the same thing that was there yesterday is going to be there today. That is probably the most important thing we can do within our classrooms — make sure that when students come back the same set of principles are operative today as yesterday and the day before. They cannot handle swift changes. They need a very structured environment if you expect them to avoid undesirable behaviors. Most come from very disordered home lives. They get up in the morning in a disordered environment and they stay disordered unless you provide order for them.

At the same time you are providing structure, you have to always remember to provide flexibility. If you are right in the middle of a vocational lesson and you can see the signs of stress in a child then you have to stop. The vocational lesson is not as important as dealing with that stress. Sometimes in the middle of a language class you have to quit because a child's need is greater than what you are trying to teach. This is hard for teachers. Too often, if you teach language arts or math or a vocational class, what you teach seems to be the most important thing in the school. A child rejects that and may shake up your tree a little bit, so you need to stop and deal with needs as they arise. These children cannot deal with a delayed time frame.

You need to have options within your classroom to deal with behavior. You have to be prepared and ready for this student. You cannot go straight to your extreme discipline — sending them to the principal. Once you have done that you have probably done the most you can do.

So you need options. At this time Harry Goette will review some actual classroom situations and what you can do to maintain control.

Goette: I am a driver's education teacher and I have worked in the classroom with these students for five years now. I want to pass on some of the things that I have had success with, and sometimes failed with. To answer Dale's question about discipline, what we do first is try to prevent confrontations with students. If we can prevent the problems we will never have to try sending them to the principal. Second, we try to handle those problems when they arrive. And then, we do go to the principal, but only as a last resort. That is very important.

Most of the time when these kids demand your attention they are going to get it either on their terms or on your terms. When one starts yelling and misbehaving and you start yelling back, are you dealing with the problem on his terms or yours? He has got you. If he understands your terms and knows the consequences, you can probably work on your terms — but not all the time. We cannot help these students if we do not know how. We will fumble around and might even hurt them. I want to talk to you about trying to set up a classroom in a manner that the students will accept, getting them into class, and working with them to eliminate having to go to the principal.

The most important thing I can share with you is to build a close relationship with them. As we organize our classes we need to communicate to the students that they are going to make that class what it is going to be. If they cooperate it is going to be a good class; if they do not, it is going to be a terrible class. In a regular classroom setting most teachers give the best students all the attention and then eliminate those people who really need attention. Emotionally disturbed students want attention too, and they are going to get it most often by misbehaving; but, if you want to give attention to them on your terms you must be prepared; not only for your lesson, but for them as people. And if you cannot handle them, forget the lesson.

Most of the time, with emotionally disturbed students, you will find a student bouncing off the wall — but not always. One may come in and say nothing. If so, that student has a lot of problems. That is the one who worries me the most. When they come in my driver's education class I must start right away working to control them in the classroom situation. I must have absolute control because I have to trust them and they have to trust me. After all sooner or later I have to jump in the car with them and if we do not trust each other then we might have an accident. In five years I have not had an accident but I feel that we have trusted each other. I have made them realize that this is their class; they can make of it what they want.

You also have to be positive. Many times when a student comes in, you say; "What is your name?" put it down in a book and let him sit down. What should you do with that name? You should remember it right away. If I knew all of your names we would have a lot better personal relationship. Begin to establish that kind of relationship right away with students. Scolding them the first time they come in will not do that. Sometimes you have to ignore some behavior for the sake of a good relationship with your students. That is hard to do when they are calling you names, or slamming doors. If you are offended by their language and you scold them for it, how are you starting your relationship with them? Sometimes we find that their vocabulary is inappropriate or that their behavior is inappropriate. This is a defense mechanism. What is the mechanism of the girl who just sits there? Withdrawal. But this gives us two messages. One, that they are there, and two, that they are insecure.

I feel that students want to learn and want to please the teacher. We may have personality conflicts with students but we have to treat them like everyone else and make them feel like they are a part of the class. There are lots of ways to do this. Let's say I ask a question. A boy answers it incorrectly, but since I want to make him feel a part of the class I tell him that his is not quite the answer that I am looking for but that he must be a real smart student because he answered the question I had in mind to ask next. Then I make up a question and say here is his answer. That makes him feel real good about me and about himself and about the class, too.

Many times we do not take the time to make them part of the class. We do not meet them in the morning when they come in the door. If it is just lip service they will see right through it —

you have to be sincere about what you say. I really feel that they all want to please you. They were not born emotionally disturbed. Something got them that way because something went wrong in their lives. They resent that and so they take it out on the teacher or take it out on themselves. In the end, who loses in all this? The students do — they always lose. Make sure you do these things; you have to push yourself or you just forget.

Find out about the students. First find out their names. They love to be called by their names; they respond to that. Do they like football, cars? Find something that you can talk about — something you can get going with them.

Another technique I have found is that you cannot make too many demands on the student right away. If you say, "Tomorrow you will be here, you will not be late, you will be in your chair and you will work," is that fair? Can they live up to that? Probably not! We have got to get a relationship first. "You came to class today and I really like that. And it is good for you too because you can succeed when you come to class. I want you to succeed." I think the students would consider that a little more fair. What is more, it will bring them back.

We need those students in class, on time. That is what we need so that is the first thing we talk to them about. Then I let them tell me what they need. Sometimes they say they need to get out of this school, that they cannot stand it. I ask them to give it a week. I say, "After a week if you decide this is not the school for you then we will talk it over and see what we can do." I always give them a chance to have some input, so that they feel this is their class, this is their workbook, this is their folder. It will all be successful if they are successful and I am going to do everything in my power to help them with it. I need to communicate this to them.

You also need to set down the things that you expect and some of the things the students expect. These are pretty flexible. Most of the time you end up getting what you want but the students are a part of it. A lot of teachers do not do that. They say, "Here is a list of my rules. If you break my rules you are going to the office." There is no success in that. I have three things that I want my students to do: be in class on time, stay on their task, and avoid interfering with the education of the other students. Those are hard tasks for them.

But think about it. If I tell them all these rules the first day that I have them will I be successful? Usually not. I therefore give them a grace period. I say, "Look, I will give you three chances at coming to class on time. After you use up those three then I will do one of these things." Then I give them a list of things that I will consider doing. If they know there is a consequence for what they do then most of the time they will not push too far. But if you never tell them that something is going to happen to them they are going to be short sighted.

And you must respond immediately. When they walk in late the first day you walk right over and tell them, "Remember what I told you yesterday. This is the first time you are late, and I do not allow that." Surprisingly enough you will not have too many times like that if you have to tell them right away. But they will not live up to your expectations if you do not have any or if they do not know what they are.

Now, do you *really* expect these students to succeed? Many teachers do not, and they communicate that in the way they deal with their students. You *must* have high expectations. Now I am very careful about the goals that I set for them because if they cannot obtain them they become frustrated, they misbehave. I start off by establishing a goal for the students. For example, you might say, "We are going to work very hard to build a bookshelf that you can take home to your parents and show what good work you do. And I know you will do a good job. Your parents will be so proud of you when they see that bookshelf!" You will have a lot to do to get to that goal, but first you have to set it up so they are always thinking about that bookshelf and taking it home to their parents. I do not care what kind of problems they have at home, they always want to please their parents, so this is another high motivational factor.

Once again, you need that good working relationship with the students. You cannot be their buddy or their best friend, and you cannot be too [illegible] too firm, because they do not like authority figures. In [illegible] you have to be firm with your rules and be consistent. I can never change my rules and treat one student any differently from another even though one misbehaves more than the other. If I do they will lose what consistency I have put in their lives and they need that structure. You have to display that structure in the way that you handle them. If you treat one differently then they resent that and there goes your communication.

Another thing that is very important is positive reinforcement for everything, even the simplest thing. When the last student comes in, closes the door and sits down, what can you reinforce? Everything. "Well, I am glad to see you this morning and everybody is here in class and we are ready to work. I really appreciated your work yesterday. I was so impressed with it and probably we can do even better today. And by the way, thank you, Susie, for closing the door when you came in." Make her feel like she is really helping out there.

And what about negative reinforcement? One of the things when dealing with students is to never yell, because if you do, you have already lost the battle by your tone of voice. If I yell I am already on the defensive. You must always keep a speaking voice when you are confronted with a problem or you will make it a bigger problem than it already is. My big guns come through the other students. What a weapon peer group pressure is! They tell a new student, "Hey, he is not going to allow anything." If a student is talking and does not seem to want to stop, you say, "We want to start the lesson and you are interrupting the learning of all these other students who want to get their licenses." The pressure is tremendous. As soon as you have students succeeding, then your other students want to join that bandwagon.

How many of you really look at your student to see if his eyes are bloodshot because he has been out all night drinking, or to see that the last two or three days he has lost weight. You might find out he has been out on the street and has not eaten in three weeks. His mother kicked him out and he has been living with some guy. You cannot solve all those problems in your classroom but you can notice them because that is where the behavior is coming from. These students do not hate you. They just do not like what is happening to them. They resent everything, and they respond by taking it out on you, or on themselves. This is basically the reason for their disturbance. They want understanding, but they also want you to be fair and consistent, without backing down.

You need to consider your classroom instruction next. One aspect is the way you present yourself. Do not wear a coat and tie to be successful. Do not hide behind the desk either. A teacher who does that is in trouble because it holds the teacher away from the students. You want instead to move around freely. Do not be afraid to touch them. Give them a pat on the back. Sometimes they will glow if you pat them on the back. Pat them on the head. They need that. Many times they do not get that at home. If they get a haircut, mention it. That is the relationship that you need to be building all the time.

Then we need to think about our presentation to the class. Attention span is your big problem. I try to shoot for 20 minutes out of a 45 minute class. By the time you get in and get

everything settled and get everything going — the way I usually work, that is — I will not have 20 minutes all in one lump. I also try to keep my presentation smooth but with changes. After no more than 10 minutes I change the format. That gives them time to relax again. Of course you cannot pause for a long time, but if you change to something else like a presentation of a chart, or something on the board, you will give them a break. Your class should be very, very organized; then many things can be presented.

Many learn by what they see. This is something you want to do. You want to make sure you have a lot of visual things around. Use your media — transparencies, filmstrips, films, posters, anything that you can come up with that gives a lot of visual presentation. Now you may be wondering where to come up with all this? I could not purchase all of them. I had to make transparencies. I had to order films. I had to get things that get my presentation across but also keep their attention on what we are doing. I also have a workbook. If I do not have a film or transparency there is something in that workbook that will reinforce the subject that I presented that day.

In planning your lessons, how many of you write educational plans? These are a lot of work but if you are a vocational teacher and special education students are mainstreamed in your class you will be glad to have that done. We did all that lesson planning, ordered all the materials, planned the activities, had the transparencies made, all when we wrote the curriculum. My advice to administrators is to have the teachers write their curriculum. If you write a curriculum yourself — and all of you can, you just need a little guidance — you will have no trouble teaching it because it is your lesson.

Remember their success will not come from the class or the information you give them. It will come from your relationship with them. If you have a good relationship with them they will break their necks to satisfy you. Many teachers do not realize this and their hands are tied because of it.

Deupree: One thread that runs through dealing with these students is that you can be organized but not rigid on a behavior management level. You have to know how to deal with different tendencies that might arise. As Harry mentioned, one thing that we have done to help our teachers get organized as far as curriculum and instruction go, is that we have had the teachers themselves write their curriculum guides. This is a good opportunity for the teachers to come up with a lot of materials; they will make their own transparencies, they will order films and filmstrips. It organizes their instruction and it sequences it. It also breaks it down into teachable parts. A lot of times we shoot over the heads of our students, so basically we write a task analysis of the trade, cabinet-making, general mechanics or food service. We break it down into the basic skills that are needed and then we break those skills down into behavioral objectives — very small teaching parts — because some students need to have things broken down into very small parts. This all ties in very well with individual education plans and implementation plans. We use these guides to pull out objectives for the implementation of education plans.

So briefly, what I want to do is give you some examples of our guides. This is one for food services. One objective written in behavioral terms is to name the eight portioning tools used in food service. On one side we have a list of suggested learning activities. We always shoot for as many activities as we can to help out students who have different learning abilities. The instructor usually has some kind of presentation. We have an option of reading the textbook. Some students cannot read so that would not be applicable to them. We also have a transparency, and we have a test, that is, a student response sheet. If students have not accomplished the objectives by Step Number 5 where they have a test, then you have more options for them. We have cassettes that they can listen to, and we have a buddy system where an advanced student can help them. With each objective as a worksheet that is either handed out or made into a transparency so the student can see the tools and their names and then we have a test for each one. In this case it is a matching test. We try to make our tests as flexible as possible because some students cannot read. We might have to give a test orally. This is one of the hardest parts of writing a curriculum guide — getting the test to actually measure what we are trying to teach.

We also have what you would call a related lesson. We have one here for a skill lesson in a service station, again written in behavioral terms: Be able to remove and check the air filter. This is a very simple task, but it is broken down so that the student can have as many options as possible. The guide also shows what is needed for each option and has all the transparencies. This has a transparency for the different kinds of air filters. On skill lessons, usually the instructor will evaluate performance and then on the answer sheet the criteria he uses to evaluate the performance.

This objective is for general safety in cabinet making. We have eleven options here that students can go through. We have filmstrips. We have books. We have films. We have a worksheet. As you can see, we try to give as many options as possible.

We have several examples of curriculum guides. Also, a good source of information is the BEH handbook that is put out by TEA. This has a lot of good information in it and we have gotten some ideas from it ourselves.

Now I would like to stop and answer any questions you might have.

Audience: What handicapping conditions are represented at your school?

Answer: Basically, it is for emotionally disturbed students. We take students from a three-county area on priority basis and then if there is a space available we take students from other areas of Texas. We have a residential unit, where they can live the whole year.

Audience: Is the driver's education program required or do they have to pay?

Answer: Our school district does not require a fee. Most of our students usually take it. Remember we are trying to reach one major goal: to place them on the job and make them successful in the community. That is our whole purpose. We take students in, give them some vocational awareness, place them on the job for training, and then give them all the skills they would need to be successful in society. It is sometimes very difficult because it is hard to place these students on the job. People in the community are hesitant. Their age limits them sometimes. Employers do not like to hire 15 and 16 years olds too much.

Audience: How would you go about getting the people in the community to accept the students into jobs?

Answer: We have a vocational counselor who goes to individual work stations or recruits those stations. He talks to the employers, explains to them the hiring procedures, and how students should be paid. With some of our students, we work with the Texas Rehabilitation Center. If the student is a client of theirs they will pay training fees to employers which is to the employer's advantage. Part of our graduation requirement is six months on the job, which is a pretty big commitment for a student.

Audience: How many students do you have?

Answer: In class I would say the average is about 10 to 12.

Audience: How many are in your program in the school?

Answer: Three or four hundred counting both campuses. Our students are referred to us from three counties, with 27 school districts. Some live in and some are day students who are bussed in.

Audience: I am curious about how you handle that many students with respect to the least restrictive environment. How do you justify the placement if the students are completely separated? I could see in that three-county area that you might have 50 students that you said were really severe enough to need that restrictive a campus, but how do you deal with the least restrictive environment for 400 students?

Answer: The referring school actually has to deal with this requirement. We do offer a better vocational opportunity. Our VEH training programs are more comprehensive than most of the campuses have.

Audience: What are the largest school districts that you serve?

Answer: Probably McAllen, Brownsville, and Harlingen.

Audience: In the large districts, do they also have VEH programs? Or must they come to your school if they need VEH?

Answer: Some have VEH, some do not. But a lot of times even in VEH the students are having disciplinary problems so that they cannot keep them in school. It was originally set up to be an alternative school district and that is basically what it is. If a student is in a local school district, but is misbehaving, having a lot of problems, and therefore not going to school, is the local school district serving him? No. If he will come to our school and we can keep him then that becomes his least restrictive environment. Many of our students have not been going to their local schools.

Audience: Are you funded through all the cooperating school districts?

Answer: No, we have regular funds. We are an independent school district.

Audience: Do you have a psychologist or dorm parents for the residential students?

Answer: We have a psychologist, a recreational therapist and a nurse, and other necessary staff.

Audience: Are some of your students retarded?

Answer: Yes. We have a divided program to work with them in special areas. The more severely retarded are in what we call a training center area, where they work on piece work or on-site work.

Audience: Do you have retarded students in driver's ed?

Answer: Usually only the mildly retarded, but it really all depends on the student. Some adapt real well. The majority of my students have emotional problems.

Audience: Are the students aware that they are going to a special education school?

Answer: Yes, they are aware of that since it is isolated away from their community. There is a big problem with that within the community and with the other students. The students are told, "You're going to that crazy school." We have to work with the self-concept of these students so that they say, "I don't care what anyone says, I'm learning something here." They have to feel that we offer them something. In one instance we had a student who came through and the students were giving him a hard time and he said, "Well, I'm only going to be there for two weeks." And sure enough, he misbehaved enough that he could not stay.

Audience: I know what you are talking about. I work at a state hospital, in a modified program which is actually stricter than it would be in a regular school program. But when my kids get out of the state hospital, they have three strikes against them. They do not only have to come up with whatever regular students can do, they have to do better.

Answer: That is what the employers sometimes expect. The Texas Rehabilitation Commission will give the employer a training fee but when the student walks in for that on-the-job training, the employer says, "Here, tear down this engine." Well, wait a minute! The student is there to learn skills and maybe not even that particular skill. He may be just a helper, learn the tools, help around the place. So you are right. The community can be the problem.

Audience: How long does your school last?

Answer: The students are there from nine to three. We do not start until nine because transportation is a problem. Some have a very long bus ride. If that student wants to get up at 5:30 or 6:00, ride that bus all the way in, and come to that class on time, then I better give it my 100%.

Our time is up. Thank you for being here.

VOCATIONAL ASSESSMENT OF SPECIAL NEEDS STUDENTS

JANE FRANCIS, TOM SANFORD, TOM TOLEMAN

Jane Francis, program director for an extensive and very successful vocational assessment program at the Region XX Education Service Center in San Antonio, coordinated four presentations on assessment at the statewide conference. The first is a general overview of vocational assessment as a multi-disciplinary effort.

First, I am going to give a general overview of vocational assessment, what it is, how it is done, why it is done. Then we will deal more with vocational assessment as it relates to the classroom and some of the measurements that can be administered in the classroom to determine present level of performance. We are encouraging the schools to assume this responsibility themselves, before they refer a student to the vocatonal evaluation assessment.

Then we will briefly talk about some curriculum that can be matched up with criterion-referenced assessment. When students are referred to our Vocational Evaluation Center, a report is generated. Once the report goes back to the schools, we have found that there is a need for appropriate curricula to place the student into.

We will also be talking about vocational interests and interest inventories and we will discuss the following questions. When is the information valid? When is the best time to do an interest inventory? What kinds of experiences are needed before doing an interest inventory and how can they be used as a tool for planning, instructing or placing in a vocational program?

And finally we will try to pull all this information on vocational assessment together: what you want to measure, how to measure and interpret, and how to find out the things you want to find out. We hope that you can take back the information that you need in order to go into this process in your schools.

"No teacher can truly promote the cause of education unless he knows the mode of living in which that education is to prepare that student." This is a quote from Ruskin. Is choosing a career a game of chance? Let us stop and think about that for just a minute. There is a certain element of chance, an element of being in the right place at the right time. Perhaps for a lot of us it was who we knew rather than what we knew. It might have even meant taking a job for which we were not fully qualified, for which we might not have all the necessary certification. But we had enough confidence to acquire the skills necessary for that job.

This may not necessarily be the case with a lot of handicapped students. After going through a special education program, they may not be totally prepared to enter the world of work. An employer may ask, "How much of an investment is it going to be for me to take this student and prepare him adequately to do the job that is expected of him? What is his production rate? How fast can he work? Can he work independently? Can he follow directions?" Employers are skeptical about hiring the handicapped. So I think we need to know specific information about these students that we can articulate both to vocational teachers and the employers, the skills the student has, his strengths. I suppose *that* is the premise upon which I base the necessity for vocational assessment for the handicapped student.

You can gather a lot of information in vocational assessment. And I do not think that it is discriminatory to do vocational assessment for the handicapped. You are doing it to choose training, to determine how this student learns. We need to know what we can do to help this student to better prepare for the world of work. In looking at the student in a vocational assessment, we are looking at an individual, we are looking at the many things that make up the individual — interests, background, health, physical abilities, prior education, integrity, emotions, hobbies. All these may be job-related and lead to further employment possibilities. His temperament and his home life, of course, would be related to work. And so would his ambitions, socioeconomic status, expectations. What kind of lifestyle does he want to lead? What experiences has he had? This information tells a great deal about the individual, his traits, and his characteristics. So we look at the total person, rather than just pinpoint skills in isolation. Vocational assessment is worthless if you are simply measuring motor coodination and manual dexterity in isolation. There is more to it than just how a person functions. These are the items that I think we need to address in the vocational evaluation.

Three laws have generated or caused vocational assessment for the handicapped to be a requirement in the *Policies and Procedures Manual*: P.L. 94-142, P.L. 94-482, and Section 504 of the Rehabilitation Act (P.L. 93-112). These mandate that public schools provide vocational training for the handicapped to the maximum extent possible. However, I do not think these laws intended that all handicapped students be placed in vocational education, nor am I advocating this. I think there has to be a collection and a process for matching and finding the appropriate placement. The law says the student must be placed in the least restrictive environment, and must be given a free and appropriate education. So I think we must determine the most appropriate placement and what strengths these students have that ensure their ability to succeed before placing them in a vocational program; we cannot set them up for another failure.

I must say that although we are going to be talking about a vocational program of a typical handicapped student, there is no typical handicapped student. Therefore I do not think we can look at any one method, I do not think we can look at any one test for every student. I wish it were that simple, but it is not. The better you know and understand the students, the better you will be able to work with them. Vocational assessment is a multifaceted, multi-disciplinary, on-going process. There is

already a wealth of vocationally related information about handicapped students. They have been tested and retested and some of this information can be extrapolated and used. This is probably the part of vocational assessment that should be used as the Stage III assessment required and elaborated upon in the *Policy and Procedures* Manual.

We are looking at preparing students for the step beyond high school; we want to prepare them for the world of work. Every student in high school is ultimately going to enter the world of work. There may be an interlude for college, but ultimately they will all go to work. We all have a goal to become self-sufficient participants of society. Functional competencies become a very real part of a vocational assessment and vocational assessment becomes a combined effort.

When the classroom teacher becomes involved in the process, we call this Level I. As we worked this year and had students referred for vocational evaluation we did not know whether or not they had some of these competencies. How do you measure them if you do not have the information? We therefore required an intake form which gave the information that was already in the record. Most of this dealt with psychometrics. We developed a criterion-referenced test which measured some of these things. We piloted it this year on about 100 students, looking at the basic functional skills that are prerequisite to any vocational endeavor. If the student does not have a positive work attitude, if the student cannot tell time, make change, measure, use some of the functional things that we use every day, then he is going to have some difficulty in a regular vocational program. He is going to have even greater difficulty in a job. So in addition to the intake form we require a pre-vocational behavioral checklist from the teacher who has had this student. These are the things that need to be measured as early as the eighth or ninth grade because these are skills that can be addressed in the instructional program; these are the things that can be changed as the student goes on toward vocational placement or job training.

Already in the records there is information that can be included in a vocational evaluation report. Physical information may definitely be related to the job the student can go into, the kind of career. Family information may definitely be related to what the student is interested in doing. What are the expectations of his parents? What information is he getting from them? All of this becomes a part of vocational assessment.

The vocational evaluator might then contribute a diagnostic battery consisting of vocational interest assessment, a work tolerance assessment, and performance. The first thing we had to look for in the Vocational Evaluation Center was what tests are on the market. Believe me, there are a lot of tests on the market dealing with vocational assessment. We screened 95 tests looking for those that would be appropriate to administer to handicapped youngsters who had minimal concepts.

Being a classroom teacher, I felt that when an assessment was finished it should bring about a change for the better. We therefore related assessment to curriculum. I have acquired over 120 curricula, from all over the country, and the *Policies and Procedures Manual* says that the IEP must be developed within the context of a defined curriculum. At the secondary level there really is no defined curriculum. That leaves the classroom teacher asking, "What am I going to do? What is available?" So we have acquired these curricula, some in the area of special vocational courses. As a part of the dissemination we will probably print the names, addresses, and costs of each curriculum. Some are very inexpensive, and others have been developed on vocational money in other states and are therefore public domain.

We explored different work samples and tests that were available on the market. We are dealing with secondary students for whom we need to assess potential in regular vocational programs. We have diagnosticians who say, "I want to give a test. I need to choose an instrument." We keep all these instruments. When the student first comes in and we have the basic information on this student, we can pretty well tell where to start, what kind of test is going to be appropriate. We are not interested so much in what percentile a student reaches, but rather with observations, how he learns and approaches the task. These are pieces of information we can give back to people in the schools. These are the things that teachers need to know in order to teach this youngster, to help this youngster. These are the things that will bring a change for the better.

In the following session, Mr. Toleman will elaborate on the use of criterion-referenced tests as part of a vocational assessment. There is no mystic about these tests and almost anyone can develop and use such instruments. This is that part of a vocational assessment that addresses the basic functional skills and relates more closely to the instructional program of preparation for living and making a living.

PRE-VOCATIONAL CONSIDERATIONS IN VOCATIONAL ASSESSMENT

JANE FRANCIS, TOM SANFORD, TOM TOLEMAN

In this second session on vocational assessment, Mrs. Francis' assistant Tom Toleman discusses prevocational aspects related to the classroom covering the present level of performance in the functional skills areas prerequisite to any vocational training program.

Francis: In this session we are going into the criterion-referenced test, classroom measures, and other things that would relate back to the curriculum process that goes on in the school. We are very fortunate to have my two assistants talking about the nitty-gritty kinds of things, because they are in it every day. These are the gentlemen who are involved with the students, who have used the instruments, and probably can answer just about any question that you can ask at this point in time. Mr. Tom Toleman is going to talk this session and answer questions giving you some information from things that we have learned. He has a varied background in business and psychology, working as a consultant with the school district and as a diagnostician.

Toleman: When we started doing vocational evaluations we discovered there were some things that we did not know. We thought we would be doing work-samples, testing specific skills and matching them up with specific jobs; we had this idea of doing very interesting things with youngsters to help them. Then we discovered three things we had not planned on measuring. One of these Mrs. Francis has already discussed at some length; pre-vocational skills. We found out, for example, that we would have youngsters who were in their second year of construction trades who still could not use a ruler to measure, count money, tell time, read a calendar, or fill out job application forms. They did not know much about interview techniques or how to present themselves in interviews. They just did not have what we now call functional skills, pre-vocational skills or simply survival skills — those things which make it possible for people to function independently in everyday life.

The second thing we ran into was an almost total lack of awareness of careers, vocations, or jobs, including prerequisites for a given job. The third thing we encountered when we went to Austin not long ago, and talked to people from industry. They began telling us what they wanted to know about students. One thing was personality characteristics — things like motivation, work attitudes, honesty, integrity, reliability, and these things we did not have the least idea how to measure. So we began looking for suitable instruments to explore these three areas. Frankly, we had trouble finding anything good.

CRITERION-REFERENCED TESTS

Before I go any further, I would like to address the concept of criterion-referenced tests. Criterion-referenced tests have come onto the market as a panacea, a cure-all. They emerged right after norm-referenced tests had fallen into disfavor, particularly IQ tests. I think we need to keep two things in mind when we say we are doing something unique with criterion-referenced tests, however. To begin with, every criterion-referenced test is normed. It has to be. If you have a particular skill that you are going to measure for sixth graders, how do you know that skill is appropriate for sixth graders rather than eighth graders? You know because it has been determined on a norm-referenced basis, where researchers go into the field and find out what sixth graders across the country can do. They say sixth graders should be able to measure to within half an inch, then set up a criterion-referenced test to determine whether the student can actually do this. That is the first use of normed material.

The second one is even more important, because when criterion-referenced tests were developed, everybody thought they were wonderful because they not only told what a student could do, but also how to teach the tasks included on the tests. We give a pre-test and we teach and we give a post-test. Some very expensive, highly computerized systems are dependent on this management system. But supposing that you have a student who has achieved eight objectives during the school year. Is that good or bad? Have you taught the student enough? Have you taught him too much? Has a school somewhere else taught the student ten objectives? Once again, the norm-referenced criterion is established; that, overall, there is some number of these objectives that a student can acquire during the year, given the number in the class and how much power you have for instruction (as per Marc Gold). On a one-to-one basis you may be able to teach one student 20 objectives, but if you have 30 students in the class you may be lucky to achieve four. So what should you expect? What is a good job and what is not such a good job? That is the second point.

The third point is that criterion-referenced tests are no better than any other tests that measure something of no importance. For example, a criterion-referenced test that measures the ability to count money is probably pretty important for daily living. What about a criterion-referenced test that measures the student's ability to list all the prime numbers below 100? That is also a criterion-referenced test; but for the students we're dealing with, what is its practical value? So when we point out these tests to you and say this is a criterion-referenced test, we are not recommending them. A criterion-referenced test measures an individual's ability to meet criteria in accordance with how the test is measured, but if the material is irrelevant, it is no better than any other test.

SCREENING INSTRUMENTS

Dr. [illegible] mentioned some of the pre-vocational skills [illegible] instruments that we have used for screening [illegible] streaming purposes, I do not necessarily

mean in large groups. We use them with individuals, maybe two at a time, and maybe even one at a time. They are screening devices because they are not used in depth. Even though they may be criterion-referenced, there are not a lot of measures of each particular skill. On a given test there may be only one problem in making change; that is a screening test. If there were 30 problems in making change you could say it was more in depth.

When we first got started, we designed a lot of little teacher-made tests, simple handout sheets. One on making change has different items like: "Make change from a nickel — if you spent two cents, how much change would you get back from a nickel? If you spent 50 cents, how much change would you get from a dollar?" A time-telling test has pictures of clocks and right underneath each clock asks what time is indicated. Calendar tests ask students to name what happens in different months — when Christmas is, when Easter is, when Thanksgiving is, when school starts, and when school ends. Those that deal with equivalents are very much like ordinary classroom tests. They are not any different and we do not get much more favorable responses to them than a lot of people do in the classroom. A test dealing with money concepts actually shows what the student knows about the use of money — what a gallon of gasoline costs, what a pair of shoes costs, what gross pay is, what net pay is, what deductions are. These all relate to the money they earn when they go to work. The test might ask, "What is FICA, what is a budget, what are some things that go into the making of a budget, what are the necessities of life?"

We get this in various ways at the Vocational Evaluation Center, possibly through interviews if a student cannot read or does not write well. If a student cannot write, but can read to the level of comprehension then we will take exams for him or accept incorrect spelling — we do not give spelling tests. The mode of administration must be such that we are measuring knowledge, rather than test-taking ability.

JOB APPLICATION WORK SAMPLES

A job application work sample we call a personal data sheet. Its only purpose is to find out which of the stimulus items the individuals recognize, like DOB (date of birth), and what response to put in that place. Once again, we do not grade them on spelling, but on whether they know the appropriate thing to put in each place. The lower-functioning students sometimes just give up when they first look at it, so we will sit down and discuss it with them: "DOB means date of birth. Look, here on the application it comes right after your age."

We have made up a good number of these tests. Some tests are made with the assistance of a diagnostician in our area for the assessment of auditory and verbal skills. This type is meant to be done by a teacher or someone who knows the student well and knows how the student responds in school. It is similar to a behavioral checklist, dealing with a specific area of skills. In measurement work samples students are provided with a ruler and they simply measure the length of the line. Now keep in mind that there is a difference between being able to measure the line and being able to record the correct length. We often find that a student can measure but does not know how to write fractions or mixed numbers. You need to remember what it is you are measuring. As a carpenter when somebody says, "I want you to go cut me a board that is six feet two and a half inches long," if he can measure, mark, and cut that board, then it does not matter whether he knows how to write that down or not; he can still function in that capacity. If he can measure the distance between two studs and tell the person that is cutting the board that it needs to be sixteen and ⅛ inches, whether he can write it or not, he can communicate the information. So you can measure different things.

GROUP SCREENING TEST

We designed a screening test to be administered to handicapped students in a group setting to facilitate the transfer of this type of evaluation to the school personnel themselves. The test covers many things. It covers time-telling, for example, time concepts, word relationships (like smallest, largest, most and least), and word opposites. This test is read and only where we are measuring reading ability is the student graded on reading ability. For sign recognition students have to be able to know the meaning of the sign, for example, "No Smoking." The stimulus that we give them is to put the number six next to the sign that means not to smoke. They do not have to write anything as long as they can make a number six. So you are dealing here with sight recognition. The test has some equivalents, some geometric figures, and our first attempts to get at work-related attitudes. We administered about 100 of these in one school district and will probably be administering about 30 more. The results will be furnished to the school and will also be used for the purpose of further refinement of the instrument.

AUDIO SCREENING TESTS

There is another one that is useful for screening. It is called the Fundamental Achievement Series. It has two parts, verbal and numerical. It is administered by audio tape in the lab. If there are a lot of hectic things going on, we can let the student sit down with a pair of earphones or we can put four students around a table and let them listen to the tape. This is a screening device and it measures the use of language, such as sign recognition, key word recognition, as well as mathematical concepts, such as figuring up a check in a restaurant, figuring gross and net pay, determining earnings for so many hours worked, and using charts and graphs to some extent. We have some different tests that screen these.

I would like to briefly mention one more to you that we start off with. This is also administered with audio tape. We find it to be important in deciding what else we are going to use. It is called the Oral Directions Test, put out by Personnel Tests for Industry. It is administered on tape and all it requires is for the students to make marks according to increasingly lengthy and increasingly complex oral directions. This is done without benefit of any example or demonstration. We are interested in knowing how well they can do this because when we get started on work samples and other tests, we want to know the best way to give that student instructions so he can perform to his optimal level. On most of the work sample tests, particularly the VIEWS tests, there is a demonstration and there is a practice time, so we can determine different levels of instruction required in order for the student to gain that particular skill. Obviously, as with most of us, the more channels we use for input the better and more quickly the task is learned. If you give disadvantaged students a demonstration and a little practice with feedback they will learn even faster.

LEVEL OF AWARENESS

The second area of assessment needs to be dealt with from several levels. We will tell you some things today and create what might be called a cognitive level of awareness. That is how we started out in the evaluation business ourselves, we had some cognitive levels of awareness. But as we got and began using experience we gained another level of awareness. As Marc Gold pointed out yesterday, in industry we put an individual on a task until he does it perfectly and then we will let that individual train other people to do it. This is the ultimate level of awareness. Repeated experience is called motor learning, kinesthetic learning, or owning the information. That is where we slip up with a lot of students in school. We assume

they know it because for us it is automatic, for us it has been overlearned. Anybody knows how to measure a line. If you can count to three you can measure a three-inch line, right? Wrong.

The levels of awareness are the same as the levels of learning. There are no good instruments to measure awareness. We attempt to do it through an interview. Some of the interest tests tend to get at something about awareness, and some of them do it on an extremely cognitive level. In other words, they will say, "How much do you know about being an electrician?"

That is totally useless. If you do not know anything about being an electrician, you do not know how much you know about it. When we first started doing vocational evaluations and somebody asked, "How much do you know about doing vocational evaluations?" we did not have the least idea. The further we go, the more convinced we are that we do not know much because it gets more and more complex all the time.

PERSONALITY FACTORS

The third thing is personality factors and we have not figured out any way of measuring these either. What you can do is measure whether the students know (are cognitively aware of) the correct thing in a given situation. Is it correct to drink on the job? Is it okay to take things from your employer because he makes more money than you do?

A test that tries to get at some of these attitudes is PAYES (Program for Assessing Youth Employment Skills). It consists of three consumable books. The format is very simple: look at a picture, select a response, A, B, or C. It measures some very good areas; job-related behaviors is one of them.

But all it measures is the cognitive awareness of job-related behaviors. It gives you no guarantee that if the students mark, "It is important to be on time every day," that they will actually be at work on time every day. It gives you no guarantee that if they know it is wrong to steal from their boss that they will refrain from stealing. We attempt to get at this to some degree through our behavioral checklist, such as, "Does he come to class on time? Is he frequently tardy? Is he frequently absent?" We get that same student into the vocational evaluation lab and his behaviors there are different. In the first place, he is in a new environment. In the second place, he is doing something different. In the third place, he is doing something that appears to him more relevant. And finally, because we use a lot of positive reinforcement, students in the evaluation lab are well behaved for the most part. We have had referrals which say, "Gosh, we hope you are going to be able to do something with this kid because we can't." The student comes out and does anything you ask him to do. So we cannot really say what is going to be the students' behavior by evaluating what they do in the academic setting.

We cannot truthfully say, either, that the behavior that is motivated by the newness and the interests of the Evaluation Center is going to carry over for the rest of his life in the working setting, where he gets up and works eight hours and goes home tired at night and gets up and goes to work over and over again. We cannot predict what his behavior is going to be and there is no instrument made that will.

This brings us to another personality factor and an item in regard to Project Discovery and the nature of the pictures. The self-concept of the special needs students deteriorates not because of cartoon formats but because the consequences of their behavior are different than the consequences of the behavior of their peers. As Marc Gold pointed out, if they cannot learn appropriate behavior how the heck did they learn inappropriate behavior? Because we taught it to them; we as parents, we as teachers. If you are going to constantly reward a student for doing an inadequate job simply because he needs praise, you are also going to teach him behaviors that are destructive to him when he goes out into the real world. Now this assumes, of course, that the consequences for your regular students are appropriate. Your special education students should have the same consequences because if they do not, you are telling them immediately that you do not expect as much of them and therefore you are not going to get as much from them.

As Mr. Sanford was explaining a test to a young man who came in for a vocational evaluation, he told him, "Keep in mind that it is not important whether you really know anything about the job or not. What we want to know is whether you think you would enjoy doing that. Just pretend that you can do any of them."

And the young man answered, "Oh, you want me to pretend I am normal!"

That is what we need to pretend for *all* of them.

We measure the knowledge of proper behavior and find that a lot of the special education students have a good knowledge. This is one of the areas you measure while you are teaching. We talk about these tests for everyday living skills, but the best way to measure these is while you are teaching them.

I was called out to a school district that we serve to discuss a young man whose behavior was very inappropriate. After we got through discussing the young man, one of the teachers in office duplicating mentioned something. Her duplicating machines have a tendency to jam up and it is an inky, messy job to get them unjammed. The teacher told me, "I have two girls that just sit down when the machines jam up, and tell me they won't clean them. What am I supposed to do?"

Well, first you have to find out what your options are, so I asked her, "What would you do if you were running a print shop and hiring some employees to do that and they sat down and told you to do it yourself if you wanted it unjammed?"

Her response was instantaneous. "Everyone knows what I would do."

But we teach the special education students that it is okay to sit down and refuse to do it. Then we send them out with a VAC and say, "Put this student to work, but only until the machine jams the first time." That is what we do when we tolerate it.

If the consequences are not appropriate we have set the student up. We have taught her a failing behavior. My recommendation — fire her. Put her out of the class. You will have to do it only once. Examine what you will have done for the others as well, because when you do something like that you are not just teaching Mary that she cannot get away with it, you are teaching everyone in the class. Those who are still there have gained a modicum of self-respect because they know they have the appropriate behavior.

Those are the areas with which we have difficulty. We do not have the students long enough to measure them adequately, but we do our best job, I would say, on the pre-vocational skills. We are spending a lot of time on that particular area. The others remain in limbo. There are materials, at least at our Service Center, available for teaching some level of vocational awareness. Vocational awareness, for example, can be enhanced by such things as the Project Discovery materials where they can actually get their hands in the mortar. But keep this in mind also that when you use any of these work samples in a nice air conditioned room, which is dry when it is raining outside; if this young person does a good job with building a brick wall, it does not mean he or she will survive in 120° temperature, climbing high ladders, carrying a lot of bricks. These work samples just do not measure all of the contingen-

cies. The final level of awareness does not come until that youngster is out in the field doing it under real conditions.

Your students are going to change their interests, what they like and do not like. What we measure today will be gone tomorrow and something else may have taken its place. So this is an on-going process and the more you measure it, and the more you teach to it, the faster it changes. I guess, in this case, a change is what we call doing a good job.

INTEREST INVENTORIES IN VOCATIONAL ASSESSMENT

JANE FRANCIS, TOM SANFORD, TOM TOLEMAN

In this third session on vocational assessment, Mrs. Francis' assistant Tom Sanford discusses interest and career awareness, addressing the use of interest inventories.

When you measure an interest, what are you measuring? Basically an interest is something that attracts you. Why would you want to measure an interest? Interests change all the time and nobody ever keeps the first job they started. For students in school, though, we find that it is useful to measure their interests. Frequently these students come to us and we evaluate them and they have been what you might call "burned out" on school. They have had a lot of failures, they do not like anything that is going on, and they lack motivation. What can you do? Interest assessment can sometimes help us discover things that might motivate the student. You might get an indication of what materials and activities to use. That is one reason for assessment.

Another thing that you can use interest measurement for is to identify if you want to place the student in a program where he is going to learn more about the world of work, where he is going to get into career exploration activities. An interest assessment can help you decide where to begin. You are not going to take a student who shows a high degree of interest in office work and start him with occupational explorations in the field of art. You are going to start him where his interests are.

Interest assessment can also sometimes help us differentiate between what we call active interests and passive interests. For example, with most high school boys we ask, "What do you want to do?"

They say, "I want to be a mechanic."

Ninety percent of the boys respond that way. A lot of times their interest in mechanics is because they are learning how to drive a car or have some older friends who have cars. They want to have a car and want to be able to drive so they are interested in being a mechanic. But often this interest amounts to reading hot rod magazines. When you put them through an auto mechanics program and they get grease up to their elbows and their knuckles bruised, then they say, "If you think I am going to do this for eight hours a day for the rest of my life you are crazy!"

But if when he does get in there, he says, "Boy this is for me; I really enjoy it," that is an active interest. If he just likes to read about it and look at pictures then that is a passive interest. Some interest inventories can help us make a distinction between them. Of course an interest inventory can help in the decision-making process up to a placement in a vocational program or on the job. Those are some reasons why we want to measure interest.

Now, when should we do this? When is the best time to take handicapped students and give them an interest assessment? The answer to that is whenever you think it is appropriate. We assess the interests of all the students that are referred to us regardless of their age. They should be measured whenever it is deemed appropriate. I think you need to start assessing interests in elementary school. We think that interests need to be measured more than once. You can take a student, assess an interest, find out where his interests are, put him through some occupational exploration, but then he might change those interests. The best way to assess interest is in an on-going sense. The way to do the assessment is to give the student the experience. Put her in there, actually let her do some of the job tasks, then do some counseling: "How did you like this?" "Would you like to do this as a full time job?" Get some feedback and keep records.

We started by using interest tests that involved having the student respond to pictures. We found immediately that a lot of students that we got did not recognize what the person in the pictures was doing. So you need to watch for that if you are going to use the test, especially picture interest tests.

There are also a lot of tests that require reading and that is another problem. When we took a student who had a very limited range of knowledge about different jobs and a fairly limited occupational knowledge, we found that after assessment we ended up with unintelligible results. If the student does not know anything about the kind of job that he might be interested in and does not know about jobs as a whole, what are you measuring when you measure occupational interest? Some of these tests can get at that very problem through a projective sense. Even if a student does not know exactly what jobs are represented in two pictures, choosing one over another does mean something. Interests are really based on experience and so we must allow students to have experience relative to the world of work.

Another problem in the use of interest measures is that sometimes a student shows a high interest in construction trades, but after being in that program for a couple of weeks the student says, "Man, I didn't know all this stuff." They want to get out, but by then it is too late. That is why interest inventories given at one point in time should not be used to make programming decisions. You have to look at everything else contingent on the student and all the other available data to see if your measurement is valid.

In terms of format, there are basically two formats for an interest inventory — one with pictures and one that requires reading. The ones that require reading are usually of two different kinds. One gives you a list of job titles and you decide whether you like one a lot, a little, dislike it a little, or cannot stand it. You can see the problem if the student does not know what a job title is. The other kind requires reading descriptions of activities. The instructions stress responding to this activity as part of a full-time job and has the same answers: like a lot, a little, etc.

The first instrument I want to talk about is one that requires reading — it is called the Comprehensive Career Assessment Scale. This gets at awareness as well as interest. It has a book that goes with it that gives job titles, which can be read to non-readers. In this particular test, the student responds to a seven-point scale from "like a lot" to "do not like a lot" and from "familiar" to "not familiar." For each one of these job titles he is actually telling you whether he is familiar with it, and whether he likes it a lot. That test is hand scored. One problem with it is that some handicapped students do not respond well to ranking. They do not even know what ranking means. You give them a seven-point scale and they do not understand what to do with it.

The Geist Picture Interest Inventory some of you may be familiar with. It has some advantages and some disadvantages. It is relatively quick to give, does not require very much reading and does have pictures. The student can respond to this without having to read. The test just asks things like, which would you rather do? This inventory does have separate forms for males and females. All of the interest inventories with separate male/female versions are all shorter for the females. I do not know why that is; it makes them too narrow. In the Geist Picture Interest Inventory, students mark what they are interested in and then the examiner goes through and counts up how many circles for each area and gets a total. Some areas, like drama, have only two pictures in the whole test. Students cannot begin to show the depth of their interest with only two selections. Are you going to take a student in a program based on her response to two pictures, both of which also relate to other areas?

The male version has eleven areas and the female version has twelve. The female version includes personal service. Personal service is generally nursing, food services, being a waitress, those kinds of things. This is not included in the version for the boys, so the boys do not get to express interest in personal service on this particular test. This test does have great norms, however. The inventory is extensively researched, is quick, and requires very little reading. You might want to consider it, even though it does have some problems.

I know of another inventory that comes out with all kinds of really neat information but, unfortunately, it also has some problems. That is a written test (OVIS) that requires reading and is not one that could read to a student because it has 280 items on it. I suppose you could put it on tape. It has job descriptions and asks, "Would you like to do this as part of a full-time job?" It mentions things like greet business clients and direct them to the proper office. This overcomes a little bit of the problem with lack of career awareness. OVIS is scored with a computer and comes with a printout. The printouts that we have seen are eight to ten pages long with all kinds of information: information on occupational plans, the best-liked subject in school, what type of program you want to be in, what your plans for after school are, whether you are interested in going into a vocational program, and what your choice would be. This is the information the interest survey comes out with.

The Ohio Vocational Interest Survey is widely used in rehabilitation centers. It does produce a lot of information. Unfortunately, if you have a student who cannot read or does not know much about the world of work, you do not know what you are really measuring.

Another inventory is called the Picture Interest Exploration Survey or PIES. This interest inventory is on slides and has a tape. Rather than people at work, this shows hands at work. They did not want to have any sexual bias in the interest inventory so all that is shown is hands — even though you can tell which are the girls' hands. Unfortunately, it is hard to know at times exactly what those hands are doing. To complete the test the student circles the numbers of the slides that show what he would like doing. Slides come up every three seconds. We like PIES because of the nice pictures and because it would be a good tool for doing introductory career awareness activities. We go through the whole set of slides and talk about what those people are doing, then give the interest inventory. It has 156 slides in all and covers 13 vocational areas.

Another one we use fairly often is put out by the AAMD people. This is another picture interest inventory, again with a separate version for male and female. This female version has only 40 sets of pictures while the male version has 55. The interest areas are different as well. For girls they have laundry service, light industrial, clerical, personal service, food service, patient care, horticulture and housekeeping. The boys have automotive, building trades, clerical, animal care, food service, patient care, horticulture and housekeeping. The boys have automotive, building trades, clerical, animal care, food service, patient care, horticulture, janitorial, personal service, laundry service, and materials handling. The test is designed for use with mentally retarded students, and it has norms for high school students and adults as well.

Another inventory, the COPS, is put out by the Education Industrial Testing Service in California. It goes along with something called the CAPS, the Career Ability Placement Survey, and the COPES, the Career Orientation Placement Evaluation and Survey. This is another one that requires reading and has a job activities section. The student marks on the answer sheet a capital "L" if she likes it a lot, a little "l" if she likes it somewhat, a big "D" if she does not like it and a little "d" for dislikes a little. This is self-administered by the student, also self-scored and comes out with a composite interest score. The student can use the career guide and look up where her interests are and what kind of jobs are available. This has both career assessment, interest assessment, and career exploration built in. If I had a career orientation class and had students who could read, this would probably be my choice for materials to support that curriculum and to help with counseling and guidance regarding career interests. But we do not use this for our handicapped students because most of the major problems that handicapped students have are with reading.

Another inventory that is part of a whole system is called the Interest Survey Ensemble. This has a different format than the rest. This one uses little cards that have both reading and non-reading. It has a picture of the occupation and also says what it is. The student is given a set of 50 cards and a board with 50 squares on it. The student rates the cards and arrange them on this board from -10 to +10, 10 being the one they like the most and -10 being the one they like the least. After they do a second set, you come out with a profile. The problem with this one is

that students who lack career awareness or who have had all their motivation destroyed start with number one and fill that side of the board first. When they get to the other end they are left with activities they do not like, something like emptying a bedpan. Even though they were told they could rearrange it, they just put that at number 10. So this test requires a lot of counseling and individual attention. One of the interesting ways to use this is to give the student a lot of help, go through the picture book one at a time and explain, read the captions, and then have him choose where to put it on the board. Do the whole first 50 that way, give him the second stack, let him do it independently and then compare the results. That can give you a handle on career awareness.

Some other materials from the University of Michigan are good for coordinating and instructing. These materials analyze a task that is being taught in a vocational program and give the resource teacher a lesson plan to teach supporting skills for that particular task. The resource teacher takes three-by-five cards, writes the task on those, gives them to the vocational teacher, and says, "OK, I want you to arrange these in the order that you plan to teach."

The vocational teacher goes to her materials, decides which are the basic skills that a student needs to do the task and what will help the student know what he needs help in. It is a good system. It looks complicated at first but once you figure it out it is pretty straight-forward. These materials also have an assessment of enabling skills which are all coded into specific vocational programs. Auto mechanics, for example, has certain very basic enabling skills: able to stand, able to walk without bumping into the table, and so forth. That system correlates all those enabling skills to the specific program, so it might be something worth investigating. By the way, it might take you all year to see the presence or absence of the particular skill in the student. The enabling skills survey is designed to be done at the ninth or tenth grade level before the student enters, but it can be used after placement.

Another curriculum tool for vocational assessment of interests or for exploration of interests gets more specific about the world of work. This is the Vocational Interest, Experience, and Skill Assessment. The format seems a little too complicated for handicapped students even if they can read. But it would be excellent for use in a regular career exploration class. It goes through how a job is listed, job classifications, and clusters of occupations. But again, for handicapped students this might be inappropriate.

Another one is the Vocational Interest and Sophistication Assessment designed for mentally retarded students. This one is a little bit different. Prior to the interest assessment you go through and do a sophistication assessment. You show the student a picture and say, "OK, what is the person called who is working in this picture?" If they do not say, "A mechanic," then you say, "This person is called a mechanic. What does a mechanic do besides change tires?" And you have a whole series of questions that you ask them. Then you tell them how they need to respond to the questions, what the test is all about and how to go through it. Then you go ahead and show the pictures.

Another one with separate versions for male and female is the Vocational Preference Inventory. There are lots of tests on the market that people might want to order because they have vocational in the title. This is one that has vocational in the title but we do not really see how it relates to what we are trying to do with the students. The individual responds by circling a "Y" on the answer sheet for yes and an "N" for no, but has the option of not circling anything. Most of our students would leave everything blank because most just do not know what the occupations are.

The last test I want to talk about is the Wide Range Interest Opinion Test. This is the one that we use most frequently in our operation. It is a picture interest inventory and requires no reading. Unlike the Geist, it has a large selection, 150 sets of pictures. And unlike the other ones it has a broader range of difficulty. It goes from simple basic operations to technical and high level operations. One scale shows where the student responds in terms of his tendency to choose pictures associated with high-status, high-income jobs. If you are going to use this you have to make sure that handicapped students understand the directions. The answer sheet can be hand scored using a stencil or you can send it off. The students mark which pictures they like the most and which they like the least. There is no pattern, no rhyme or reason to a lot of these responses. If you have a high positive interest in any area you also have to have negative interest in all the areas that correspond — but the student does not know which areas those are. So no one can really manipulate the test. The test ends up with 18 interest scores, both occupational and recreational, and six that are called opinion and attitude scales. There is a chosen skill level and ambition scale and sex stereotype scale.

This test is very long, though. You need to give students breaks because they are going to start marking anything just to get it over with. We usually give parts of the test, let them do something else, then come back to the test. It does take a long time. The only other problem with it is that you can get so much information that you do not know what it all means.

You cannot just give a test and make decisions based on one interest inventory only, or on what you know about the student. You have to allow them the opportunity to expand their knowledge of the world of work and have further assessments available for them. We are always asking students questions about what they like to do. As a matter of fact, they have a whole interview on just what they would like to do: What do you do in your spare time? What courses do you like? What jobs do you think you might like to do? What job do you not want to do? So we ask them a lot of questions and find out as much as we can. And finally, one of our major recommendations is to use assessment to increase career awareness. We find that there is generally a very low level of that. Students are not being taught that, or if they are they are not learning it. So we need to combine it, as much as possible, with interest inventories.

INTERPRETING VOCATIONAL ASSESSMENT

JANE FRANCIS, TOM SANFORD, TOM TOLEMAN

This final session on vocational assessment will feature Mr. Sanford and Mr. Toleman answering relevant questions, including what is to be measured, how to interpret the measurement, and whether to use commercial sample systems.

Toleman: I am going to talk about two things: What do you want to measure through a vocational evaluation, and how do you go about interpreting all the data? In vocational evaluation we wind up with a thick folder, full of numbers and observations and drafts and scales and then, to write a report, we spread it all out on the table and study it very carefully. It takes three days for it just to jell. After all, we have an intake form from the school that tells us everything that ever happened to that student in school. We have a behavior check list, a pre-vocational screening, scores from dexterity tests, work samples, plus all the observations that have been made by us. And from that we write a report back to the school and say here are some ideas for this student. You can see why it is good to decide beforehand what to measure.

So what do you want to measure? The first thing is where the students are "functioning" right now. What can he or she do now? Which pre-vocational skills are present, which are lacking? Which dexterity skills are present and which are lacking? Which behaviors on the work samples are appropriate, which are not? If you do not know where they are starting from, you cannot know where they are going and you cannot say how to get them there. So that is the first stage — where are they? You use various tests to determine this.

Then there are two things that are very closely related that you want to measure: what the students want and what motivates them. You get this partly through an interview. You might ask the student, "What would you like to do? What courses would you like to take? What kinds of work would you like to do? What does your father do? What does your mother do? Do you know anybody else who does these things?"

Then you can give them an interest inventory to get some idea of what they might want based on what they know about the world at this point in time. What motivates them is also important, but it has much to do with interest. For example, some students perform better when we give them lots of warm, fuzzy strokes, and say, "That was a good job, you did that well." We never tell a student that they took an easy test. We give them part of one and say, "We are going to give you a part now that is harder and you may not do as well." Or, "You did so well we are going to have to find some harder tests for you." We keep up the challenge. Sometimes this works, sometimes it does not. We have had pretty good luck using it, but there is always that student who just does not want to do anything. Very often when you are doing inservice work with groups of teachers they will ask you, "What do you do with the student who just does not want to do anything?" We have completed over 70 evaluations. One student did not like anything we had to offer and was not in any hurry to do any of it, could not be motivated to speed up or become more active, or anything else. The only thing we found that would motivate the student was to tell him, "If you do a good job on part of it you do not have to do the rest of it." That worked!

So what motivates the student becomes very important. Let's say the student wants to go into auto mechanics, but he does not really understand what all is involved. He is going to have to learn some new words, he may have to be able to spell and do some mathematical calculations that he cannot do now, and he may have to change some behaviors. Very often our recommendations will be something like, "Admission to the regular auto mechanics class for next year could be made contingent upon Johnny learning these particular pre-requisites. The curriculum needs to be adjusted to some degree so that the vocabulary words that he is learning, the reports that he may be writing, the things that he may be looking up in the use of reference in the library, all relate to auto mechanics." In other words, schools can make use of this information to prepare him for auto mechanics, while at the same time using admission to the class as a carrot in order to get him to learn these things.

Another thing that you want to know is what they can learn and how they learn. What he can learn is very likely contingent upon what he has already learned. If he cannot add a column of numbers, he probably cannot learn bookkeeping or accounting. If she cannot do basic arithmetic, the odds are she is not going to set the world on fire in algebra. So, what they can learn in this sense is related to the skills that they have at the present time. If they have good dexterity skills the odds are they are going to do fairly well in mechanics. If they do not have good dexterity skills the odds are that they are not going to do as well in mechanics without some help.

How they learn relates back to what we talked about a little earlier in assessing the instruction and the experiences that will benefit them. In other words, what is the nature of the power that will best serve this individual student? Can they learn from listening to me standing up here talking? No pictures on the screen, no handouts, nothing visual, just me talking? Will they learn better if I put a picture up here and a diagram and point to it as I talk? Will they learn better if I demonstrate first, and then let them repeat the task and reinforce the behavior? How will they learn? Can they sit still long enough to go through an audio visual program so that it is cohesive and inclusive enough to really teach something?

And not only how do they learn but, do they retain better if they learn in a certain way? We have already said earlier that when we learn something motorically or kinesthetically, we remember it longer. Not too long ago I got on a bicycle for the first time in 25 years. I did not do that well, but I did better than the first time I learned it. The same thing applies to roller skates and typing. So if we are going to permit them to take the carburetor apart four times and put it back together again, they will learn it and retain it longer. Some students may pick it up

simply by watching you do it. We can learn through work samples. But how do we learn what we have measured? That is where it gets a little sticky, because before you can interpret what you have measured you have to decide how to measure it. You may recall talking about the vocational skills — did we require the students to read the item and respond to the item in writing or did we read the item and accept a verbal or behavioral response? These are all different. We have to decide how and what we measure before we can make the interpretation. On our pre-vocational screening test we had to make a distinction between the recognition of the words and the ability to produce a response. This is similar to the difference between receptive and expressive vocabulary. If you say, "What kind of vocabulary does this student have?" the answer depends on what you measured it with. Did she have to produce a definition as you do on the Wechsler, or did she have to create something, integrate, synthesize? Or did she simply have to recognize the definition as in the case of our functional signs list?

Then, when you are dealing with schools you also have the problem of what the school can do. We cannot say, "Put him in this kind of program," if that kind of program is not available. So the interpretation of this data depends on many things.

We are doing some work at the present time with dexterity tests. They have been used in vocational assessments for years but some of the norms are 30 years old and are based on very small groups of people. They do not really relate to high school students in general and not at all to special education students. So we are doing a norming study. It is relatively easy to establish good norms but the variance is very small. Most of the students cluster very closely around a measure of central tendency. We also have found that there are some other uses for these tests besides just seeing how many pegs you can poke in a hole in thirty seconds; things like how the student learns motor skills, or fine motor control, or eye/hand coordination.

We are making adaptations to other tests as well. I will just give you an example. With the Crawford Small Parts, you take a pair of tweezers, pick up a little pin, and put it in a hole. Then you take the same tweezers, pick up a little collar, and put it over the pin that you put in the hole. This is finger coordination; the student needs finger dexterity to do it. But we have found that if we time students on the first three rows, then time them again on the second three, and again on the third three, we can get a rather crude learning curve. We can find out if they are getting better or if they are getting worse or if fatigue or boredom is setting in. That is pretty much the same thing as giving it to them today and again tomorrow and again the next day, which we do not have time for.

We tried this on several of the tests, and we got some pretty good indications that some of these things that we call behavioral observations can actually be quantified and measured. You can make a statement about a student such as, "At present time he does not have very good dexterity skills, but he is only fourteen years old and there are indications that these skills are developmentally based on ordinary life experiences. There is also evidence that training could improve these skills."

There is the other factor that when you are dealing with a nice objective measure like that, the difference in performance is really remarkable between a student who has done nothing more than fix his own bicycle and one who has never picked up a wrench in his life. But on some instruments you are not just measuring the use of tools, you are also measuring how good the student is at following instructions and how good at retaining instructions. On that test you get a long series of verbal instructions without demonstrations before the student even picks up a wrench to get started.

What does a test measure? It does not just measure manual dexterity or eye/hand coordination. When they tell you it measures something like that they mean that for an "n" of 100 or 1000 they expect all of the other variables to cancel out. The score will depend upon how much manual dexterity the entire group has because the group that has got a whole bunch of it will do better on the test than the group that does not. For groups, the other variables cancel out, but for an individual they do not and this is important to watch for.

We also watch to see that a low motivation factor does not cancel out the entire test. Really, for these tests, you are measuring your own ability to motivate. And remember as well that just because the title of the test says vocational this does not mean it measures something vocational. Just because the title says dexterity does not mean that is all it measures. The title may have very little to do with the test and with what the test measures.

The thing to keep in mind is that we are not measuring groups, we are measuring individuals and the variance in any individual's score depends upon where he is and where you are at the time of the assessment. I am pretty sure that I do not do quite as well on my measurements and observations on Monday as I do on Wednesday or when my wife is ill or when I have a flat tire on the way to work. Probably we all run into these problems. We get in a hurry. So our own behavior is also being measured.

I will now turn the program over to Mr. Sanford.

Sanford: The next part of this presentation is on work samples. Unfortunately there is no way to tell you everything that you need to know about work samples. Just what is a work sample? It is a simulated job task. People who have developed these things have gone out and looked at the world of work and identified tasks that are common across occupations and developed samples of those tasks. Generally, the work samples are correlated with worker trait arrangements that are in the *Dictionary of Occupational Titles*, so you can give a work sample to a student, say he did well on this, and perhaps he can go out and do that job.

All of these work samples have some instructional material with them and some have a specific training phase where the student is given training and instruction until he achieves mastery at the task. Only then is he put into the next phase, the production phase. Here he is given a specified number of repetitions of that task to do so you can look at his behavior, work methods, motor skills, and production time to see how long it takes him to do it and how efficiently he gets it done.

Because of this, work samples as a whole are very good means for making observations. We find that this is their best attribute. You can put a student in a situation where you can observe him over a fairly long period of time and you can get all kinds of indications of how he is going to behave on a job through putting him in a work sample.

Keep in mind that when we do work samples we are in a nice air conditioned building; it is not raining, it is not hot or cold; it is clean, well lighted. You all know the world of work frequently does not have those things going for it. So anytime you are using a work sample you have to keep in mind that it may not necessarily reflect the environment of the job.

Work samples *can* give an indication of a student's ability to maintain work stamina and his speed of work. It can also give an indication of the quality of the work that the student does. A lot of times you can get an indication of how students react to failure when they make a mistake on a work sample. Some of them will say, "Oops, I messed up," and go back and fix it. Others will say, "Oh, I made a mistake, big deal," and not correct it.

We can compare students' performance on work samples

to a variety of reference groups. Most of the norming data on work samples is not very good; the norm groups were too small and very specific. Even so most of them usually have some theoretical studies of the amount of physical motion within the task. We can add all that up and see how that compares to somebody who is trained or to the average entry level person. So we can determine where a student stands in relation to either a trained worker, somebody who has been doing the same kind of job for a long time and is good at it, or to an average entry level worker. This is meaningful data if we are looking at placing a student in a job situation.

Another thing that we use work samples for is interest or motivation, since we have a variety of samples and we can allow students to select. We say, "Well, we have all these things here that you might like to do. What would you like to try?" This is one way that we can get into some of the interests other than the interest inventories and the interviews.

As I said, there are a lot of these systems on the market. The main thing to remember is that there is no one system that is going to meet all your needs. We are visited by salesmen who say, "Boy, have we got the system for you. Just $70,000 and you have everything you will ever need." We have found that none of them are adequate to meet all the needs that we see in vocational evaluation. We have found that the best approach is to select certain parts of each system. Some are sold as complete units, and some are not. We generally get the ones that are not so we can get the component that we want.

Our sample is called the Comprehensive Occupational Assessment and Training Program. This assessment system has four parts with work samples, employability attitudes, job matching (which is like an interest inventory and skills assessment), and living skills. While this system is not designed specifically for handicapped students, it has recently been used by handicapped student centers and validation data is coming out. It is an audio-visually based system. Basically you put the student on the task. He has an answer sheet and when you put a cartridge in, it will give a description and then ask him a question. The machine will stop until the question is answered and the student punches a button for it to continue. An evaluator is not necessary once a student starts, but that is not necessarily a strength. We like to watch students when they are working on these rather than have them watched by an audio-visual machine. But with this system you can evaluate a lot of students with a minimal number of evaluators.

Let me go through the basic components and give you some figures. Job Matching has 15 cartridges. A student looks at the picture and on her answer sheet marks the responses that indicate her interest level, what she is looking at from her experience level and what she knows about it. The answer sheets, after they are marked, are processed by a computer. So if you get into this system you are tied to ongoing computor costs and mailing costs because you have to mail it all to New Jersey. If you want a quick turn-around time you are going to be spending a lot of money. So for the Job Matching, the basic cost of the hardware for up to 200 students is going to be about $2,000. Software costs for the computer processing is $6.25 per student. For work samples, the average price is $725 each. For the employability attitudes, the basic equipment is going to cost about $1500-$1600 with a $6.50-per-student computer fee. Living skills is about $1400 and $4.50 computer fee. So you are looking at a large investment. The round figure that we were given for getting this set up and evaluating a lot of students was $70,000.

Now, another set of work samples is published by the Jewish Employment and Vocational Service (JEVS). They have 28 work samples that correlate to 10 worker trait groups.

Another set of samples, the VIEWS, was designed for mentally retarded populations. For $6400 you get 16 work samples. We found that when we started using the VIEWS, we were dealing basically with mildly handicapped students, and the VIEWS was too easy for them. We could not get at the kind of behavioral observations we wanted to make. We wanted to see what happens to students when they come up against something that is difficult for them and most of these were too easy. They are great for a student with an IQ around 50, because you can get some really good observations. The best thing about the VIEWS is that you have to train the person to mastery; it is extremely important to find out how a mentally retarded student can learn to do a task.

Another set is called the McDonald Vocational Capacity Scale, developed at the McDonald Training Center in Florida. It evaluates such things as work habits, physical capacity, general health, and social maturity. Manual skills in this work evaluation system are evaluated by only the assembly portion of the work sample. Arithmetic scales are evaluated by the WRAT. Motivation is derived from having a student do the disc-assembly task which has 100 discs with 500 nuts and bolts and washers and you see how long the student will work at that before wanting to stop. By the way, they do not sell you this test, they just tell you how to make it.

The set also includes the Wells Concrete Directions Test, which is a good test if you need to know how a student follows directions. It involves a set of directional orders to see whether the student can follow directions or not. The McDonald Vocational Capacity Scale was designed to predict a client's potential within the sheltered workshop setting. We are mostly concerned with the milder handicaps because when those students get out of high school they do not have any services available to them. We want to get them training and functional skills so that when they leave high school they will have some basis for making a living and being independent.

Another system, also designed for a sheltered workshop population, is the McCarron-Dial Work Evaluation System. It was originally designed to predict, after a year's time, where a client would be within a sheltered workshop. This system will cost about $1500, and training is required to administer it. They have been developing and working on the use of some of their instruments within the McCarron-Dial system to use with learning disabled students. The McCarron-Dial does not address the interests or specific ability and aptitudes related to vocational programs or jobs. But it does appear to be excellent for what it was designed to do.

Another system is the Singer-Graflex system. This is an evaluation system that is probably most appropriately used as an evaluation and exploration system combined. This test uses big carrels that are self-contained, with all the equipment and materials that you need to go through the evaluation and exploration activities. It is designed for students aged 17 to 30 and has an audio-visual format with a Singer-Graflex filmstrip viewer and cassette player. The student or client listens through headphones and is given the instructions on how to do the tasks involved. Programmed into the cassette are points at which the student is supposed to stop and signal the evaluator to come over and check her work. We think it works well for career exploration but as an evaluation tool it takes too long. Some of those things take a day or a day and a half to complete. They are also quite expensive, running about $1200 each.

Another system which is not really a work sample system but is something that is on the market is a Tool-Tech-Today. It is more of a training program than an assessment program, so if you want to use it as an assessment tool the evaluator needs to be there pretty much of the time watching how the student is responding to the instructions on the audio-visual machine and

how he is handling the tools and equipment that the system involves. It uses and is designed to teach all the basic hand tools that you might encounter in various occupations. It is also pretty expensive. Couriers are running around $575 each and the program is about $500.

These are some of the work sample sets that we have looked into and used. Just remember that they will not predict anything for certain; they all have limitations.

VOCATIONAL ASSESSMENT: HOW TO DESIGN AND BEGIN THE PROGRAM

MIKE PETERSON, PAM HILL

Mr. Peterson and Ms. Hill provide pointers and suggestions regarding the systematic design and implementation of a program of vocational assessment for handicapped students. Topics include setting program goals, deciding methods to meet goals, surveying the market for cost-effective products, training the staff, and establishing the structure, schedule and procedures for the assessment program.

INTRODUCTION

Peterson: In this session we want to give you a systematic approach toward developing a vocational assessment program in your school. A number of things we say will be oriented toward secondary programs, but we will try to orient the material toward post-secondary as well.

Let me quickly give you an overview of some of the subjects and questions we want to try to deal with. (1) What is vocational assessment? (2) What are you measuring when you are talking about vocational assessment? (3) What are some of the different administrative models for setting up a vocational assessment program? (4) How do you design a vocational assessment program? How do you determine goals for your vocational assessment program? What do you want to find out about your students and the people you are assessing? How do you decide what it is that you want to find out? (5) What are methods and procedures to use in vocational assessment?

We will try to mention some specific instruments, but our focus today is going to be on giving you a broad overview and then giving you some resources where you can find more information. We will look at some of the procedures — report writing, length of testing time, number of students — and at the question of who does this and where.

First of all, where did vocational assessment come from? In the depression times agencies were dealing with people with problems. Folks were streaming in from Europe, especially disadvantaged people and people with handicaps. Agencies like the Jewish Vocational Service and others were dealing especially with these folks. The agencies felt these people were intelligent, were able to learn, but the testing instruments used to prescribe training programs for them were inadequate. In many cases, language skills were so low agencies had difficulty just getting information. Around 1936 some agencies, especially in New York, began developing some hands-on assessment instruments, which came to be called work samples. Work samples are simply a sample of work in which you have standardized conditions like in other testing or assessment situations. Over a number of years, they developed a whole series of work samples that keyed into jobs in the New York Metropolitan area. They were the first people to really get involved in this.

Around the 1950's or 60's, as people with disabilities began getting more and more attention, we started looking even closer at how to better assess them. Schools in the 50's and 60's began to deal with special education students, people that they had excluded previously. The Vocational Education Act of 1963, for the first time, emphasized these individuals. The Rehabilitation Act emphasized people with more severe disabilities, especially mental handicaps, more than in the past. Sheltered workshops in the 50's and 60's started springing up all over the place. More disabled people, more severely disabled people, started being trained. People simply said, "We think they can learn something, but we do not know what and we do not know how to tell."

So persons involved in evaluating handicapped individuals developed work-evaluation systems. These systems were then marketed and include many like the Tower, JEV's, Singer, etc. Vocational evaluation, even to this day, has been primarily associated with vocational rehabilitation and, to a lesser degree, with Manpower programs. However, in the next five years, you are going to see vocational education and special education schools get involved in the assessment of handicapped students much more than has previously been the case. That gives you some historical context. Pam Hill will now deal with the kinds of things we are talking about measuring and assessing when we say vocational evaluation or vocational assessment.

WHAT IS VOCATIONAL ASSESSMENT?

Hill: The definition that we like to use for vocational assessment is a global assessment that measures many different areas.

These areas are:

1. Vocational interests: what vocational interests does the student have?
2. Vocational aptitude and ability: what aptitudes for specific jobs does the student have?
3. Work skills: has the student ever worked before and what skills does the student have?
4. Work behaviors: what behaviors need concentration?
5. Safety skills: does the student have basic safety skills?
6. Physical skills: does the student have the necessary physical ability for the job?
7. Learning style and motivational cues: what is the student's best learning style? What motivates the student?
8. Career awareness: is the student aware of the different occupations?
9. Functional education skills: what are the student's basic reading, math, and language skills?
10. Independent living skills: can the student get to and from work, how does the student manage time off work?
11. Job-seeking skills: does the student know how to interview for a job, fill out an application, etc.?

When we think of vocational assessment, therefore, it is a global assessment in that we measure in all of these areas. The results of testing in all of these areas then gives us a basis for designing an appropriate vocational education program for the student.

Peterson: The areas mentioned above that are specifically related to vocational training might become prerequisites. Independent living skills can very easily run concurrently with vocational skill training situations. Look at assessment not just as those things we think of as vocational skills, but as supporting skills to be able to make it once you are on a job.

Hill: Before you begin testing, gather all the information and testing reports which have previously been done on the student. Some information that is listed below you will already have before you begin any testing; for instance, psychological, medical, and physical reports. You may have a very good physical therapist's report that gives you information on the student's manual skills, dexterity, strength, etc. You, as a vocational evaluator, are going to be able to interpret what that therapist says into whether or not that student can be trained in a vocational area that requires that he carry, for example, 50 pounds of weight from here to there. Therefore, you may not need to evaluate each one of these areas, if you have existing data that you can interpret and apply to vocational situations.

ADMINISTRATIVE MODELS

Peterson: Administrative models describe ways to organize and administer an assessment program. We are assuming there is going to be a person doing some specialized vocational assessment in each of these administrative models.

(1) One model is what you might call *Teacher In-Class Assessment*. This model occurs in the special education classroom where there is some special testing by the special education teacher.

(2) *Comprehensive School Based Assessment* usually occurs in an assessment center within a school. A Vocational Assessment Specialist would provide special testing (interest, work samples, etc.) in an assessment center — often a classroom. A student could also be involved in job and classroom tryouts. All of the vocational assessment does not necessarily have to be confined to just that vocational assessment center.

(3) Another model involves *cooperative programs* with other agencies or schools. Schools can pool their resources, especially in rural areas, with schools or other agencies: rehabilitation programs, CETA programs, community colleges and others. Good comprehensive vocational assessment is expensive. There is no way to get around that. It seems to be cost effective in that it is a way to get people who might otherwise end up on welfare rolls into a correct training area and eventually into the labor market. Pooling of resources with other agencies ought to be seriously considered to help distribute costs and improve services. We know the administrative problems with that, but it is possible. It has been done.

Hill: You hear the term "vocational evaluation" and you hear the term "vocational assessment." For public schools, when trying to train students vocationally, it is my personal preference that we use the term "vocational assessment." I define vocational evaluation as testing the student in several different areas and then writing a report that has X number of recommendations. After the evaluation is completed and the report is sent out, then that is usually the end of the evaluation service. To me that seems like a dead end service. Vocational assessment, however, is a *continuous process* of assessing the student's strengths and weaknesses at the beginning and during a vocational program. This continuous process is what I would like school districts to develop. They can evaluate the student's vocational strengths and weaknesses as early as kindergarten and from then on continuously. This precedes a continuous vocational individualized education plan to be followed throughout the student's school years. This distinction may help you in coming up with your own model for vocational assessment.

Peterson: (4) Another administrative model involves utilization of an Education Service Center (ESC) to provide vocational assessment for schools in their region.

(5) One model called the *Itinerant Supervising Vocational Evaluator* employs a person who has Masters Degree training in vocational assessment of handicapped students. Within a geographical area, the Vocational Evaluator works with special educators or vocational educators — whoever has the responsibility for doing the vocational assessment — in several schools in a region. The Evaluator helps local school personnel to develop a testing program and develop work samples based upon their local vocational programs. The Vocational Evaluator provides continuing inservice and staff development support for Vocational Assessment Specialists in the local schools. This model is being tried out this year as a pilot project.

PLANNING PROCESS

How do you start planning a vocational assessment program? First you need a school *task force* for administrative support. This school task force should have on it some involved educators, special educators, and preferably, somebody from the local area or a consultant from the outside who has been involved in setting up a vocational assessment program. Look at the *literature* that describes vocational assessment. Find out about it. Do not buy $30,000 worth of equipment without knowing anything about it just because it looks neat and the salesperson says it will solve all your problems in vocational assessment. Visit other programs that have a comprehensive vocational assessment program. Some of the rehabilitation programs have vocational evaluation. They are going to be using some of the techniques and methodologies that you will want to do in your program.

Get all those individuals together and make a plan to implement the assessment. Start out with something that is manageable and will give you what you need right now in terms of information. Look at making the program as comprehensive as you can over a period of several years.

SETTING GOALS FOR VOCATIONAL ASSESSMENT

How do you set goals for a program? You will want to know two types of information: (1) the characteristics of who it is you want to assess, and (2) the entrance criteria of the various goal environments.

In analyzing characteristics of the target population, one place to start is disabilities categories and that sort of thing. You can get some information about what the general socio-economic status is of these people. The instruments you use are going to change depending upon the subtarget populations. Maybe some of these things seem obvious to you but the reason we are emphasizing these is because we have seen people start setting up vocational assessment programs and the first thing they do is choose methods and strategies, saying, "Gee, that is a neat-looking work sample system. That ought to solve all our needs in vocational assessment."

Hill: This gets into viewing assessments as a stairstep procedure. When you evaluate eighth graders you know they have no competitive work experience. You have some vocational programs within your school system and you simply want to find out into which programs they might best be placed. At this level of assessment, you want to find out general interests, skills, work habits, and career awareness. However, in doing assessment programs for students at the tenth grade level, you will want to do a more indepth assessment that will pinpoint specific vocational jobs based on the student's strengths and weaknesses, because the student will soon be leaving the school setting and, we hope, getting a job.

In determining entrance criteria you must first answer the question — "entrance into *what?*". Select the various *goal environments* for which a student could be recommended. These may include: regular vocational programs, CVAE or VEH programs, job placement, the VAC program, rehabilitation workshops, etc.

Peterson: In each of these areas, you need to know the specific entrance criteria. Jobs are a little more complicated so we use the *Dictionary of Occupational Titles* and community surveys and information like that. For vocational programs, however, I found that often the entrance criteria are not written down. However, when a vocational teacher or a vocational counselor participates in the ARD meeting they use specific criteria in looking at a student. They know about him and in thinking about that program may be able to say, "No, he does not fit," or "Yes, he does." The criteria that is being used must be made explicit. What are the minimal skills needed for entrance? I think the best way to get this information is to go to the vocational teacher because he is the one that is going to be teaching the student. He knows what he is going to be willing to deal with. Talk to him. Say, "What is the minimal reading level that a student must have to enter and be successful in your course?"

Suppose he says, "Fourth grade."

Ask if the student with available help could get by with less than that.

The teacher may say, "Yes, he probably could. If you could get somebody to tutor him, he could probably get by with just sight words."

That is what you need to know. You have a general criteria and you have some minimal criteria based upon the assumption that you are going to have supportive services.

Once you know that information, then you can decide based upon your assessment whether the student ought to enter the class. If you do not know the criteria for getting into the program, how can you ever make a decision whether or not he ought to be in there?

Hill: I would like to see programs break their entrance criteria into three major areas: (1) physical skills, (2) educational skills, and (3) vocational skills. I would like to see the teacher identify the very minimal skills necessary to get into a classroom. We are not trying to eliminate any student from vocational education. We are trying to give you a model for designing a vocational assessment program based on three fundamentals. One is who do you want to assess? For which group of students are you wanting to find vocational information? Two is what options do you have in placing that student in a vocational program? Make it applicable to your local setting. What are your program options? Three is what is the minimal entrance criteria for these programs? That is the model for your vocational assessment program. Once we answer those three questions, we can then look at individual vocational questions about the students and then know which assessment tools to buy.

METHODS

Peterson: Now I want to give you an overview of the methodologies that have been used in a comprehensive assessment program. These include psychometric tests, pencil and paper tests, achievement tests, traditional tests in secondary schools that the diagnostician has already given. You do not need to repeat those, but you can use that information for vocationally related assessments. You may, however, use some vocational interests tests that are paper and pencil that your diagnostician would not use. Dexterity coordination tests are also used. We have used those for a long time and I think all vocational counselors are familiar with them. However, many are outdated and most do not have any norms based upon handicapped students. I like to have norms based on the population I am testing, as well as norms based on people in industry.

Work samples are the methodology that primarily distinguishes vocational assessment or vocational evaluation from other kinds of assessments. Work samples combine a practical approach — that the way to find out if somebody can do something is to try teaching them to do it and see if they can — with some of the statistical and procedural rigor that you use in standardized testing. Work samples are developed based upon jobs.

To develop a work sample you must first do a task analysis. Look at which tasks are used most often on a job and in the classroom and determine which are the most important. Then develop a hands-on activity, a sample of work for that particular occupation. Try to use samples of all the most important skills that are used in a job — physical skills, educational skills, use of tools. Once you do that, develop a standardized procedure for giving the test and develop some norms. Get some norms on people in the industry if you can. Then get some norms on handicapped students. I would like to get some norms on beginning vocational students, not special needs students, just beginning vocational students and see who was successful and who was not. See if that test showed any distinction between those two. If it did, then you are lucky, and your test can help pick up on some subtle characteristics. Develop your norm base and develop some procedures for assessing the student's skill, how the student learns, how the student approaches the task, and how to best teach the task to the student. You cannot quantify that very easily, but you can see it. You need to have a procedure for recording information that cannot be quantified in norm-based tests.

Audience: Is there any way to pinpoint a vocational area in which a vocational student may be successful?

Peterson: Yes, that is possible. However, the broader you make the assessment, the more comprehensive and sophisticated your assessment is going to have to be. You are probably going to have to pinpoint something the first year and work toward making it more comprehensive as you progress. Of the work sample systems, COATS probably is the most comprehensive. Of course, the more broad and comprehensive you get, the less specific information you get. Some trade-offs occur.

Of the two types of work samples, commercial samples probably have a more sophisticated normative standardizing procedure than you could achieve in a local situation, so that is an advantage. The disadvantage is that they are not keyed specifically for your local programs. You can develop your own work sample to be more applicable.

Audience: A student is supposed to have the assessment before he goes into the vocational program, so it seems like the regular teachers and the resource teachers should be developing some of these skills. But it is not implemented at the local district — they give everybody one blanket test.

Hill: These methods are just examples of how you might do vocational assessments; you can use any combination of these, or just one, depending upon the kind of information you want about that particular student.

RESOURCES ON VOCATIONAL ASSESSMENT

Peterson: Let me just quickly mention some resources. The Materials Development Center at the University of Wisconsin has a Sample Work Manual Clearinghouse where people from around the country who have developed standardized work samples have sent their manuals. If you write there, for a very small fee, they will send you a catalog of names. If you see one you are interested in, you can get a copy of the procedures and manual for that work sample that you could copy. These can help you develop your own work samples. You do not have to start totally from scratch. One textbook has been written on vocational education by Walt Pruitt. The book is oriented more towards rehabilitation, but it is useful as a detailed introduction to vocational evaluation or assessment. Two booklets put out by the Materials Development Center compare four evaluation systems. These have summary information you can compare. While these are not going to answer all your questions, they are a good place to begin. Once you look at these reviews of commercial work samples, and ask the people in local programs who use some of them, you can better understand their answers and be in a better position to purchase work sample systems that will be useful to you.

The Vocational Evaluation Work Adjustment Association is an association of professionals who are involved in work adjustment behaviors as well as vocational evaluation. They put out a good quarterly journal that deals with both subjects. Another resource is a training program in vocational evaluation of handicapped persons. North Texas State University at the Center for Rehabilitation Studies has a Master's Degree program in Vocational Education. They are in the process of solidifying a program to give you a choice between a Master's Degree in rehabilitation, special education, or vocational education that will allow an emphasis in vocational assessment. You can take courses specifically designed around this content for training vocational educators.

WHAT THE LEARNING DISABLED STUDENT CAN DO VOCATIONALLY

RAY HENKE

Raymond O. Henke, Associate Professor at the University of Texas Health Science Center at Dallas, is a psychologist specializing in learning language disabilities. In this session Mr. Henke stresses the need for good diagnostics that describe student's abilities and weaknesses in regard to what they can do vocationally. Henke also explains how neuropsychological understanding of the student's abilities can be very useful in preventing over-employment or under-employment of the learning disabled student.

This morning I hope to give enough information to whet your appetites at least, then look at some ways that might be helpful in working with learning disabled (LD) students. I will not get into a long definition of what LD is because that would take another hour, but I would like to say where I am coming from. If you read the literature of people out of neuropsychology, you will see that an average intelligence is what is usually expected from an LD student, an intelligence at least above mentally retarded ranges. Also, there is some significant deficit in their learning, and there are usually sensory motor deficits. In other words, there are neuropsychological problems. Now "neuropsychological problems" means there is a problem in how the cerebral cortex functions.

When looking at LD students and placing them vocationally, I believe that good diagnostics help us, and yet I do not want us to stay within the diagnostic game. I believe we can look at seven clear aspects of learning disabilities.

The brain and central nervous system. We must look at the brain and how it functions or at the central nervous system. There are two brain systems, the lower brain systems,

often referred to as the old brain, and the higher cortical systems, involving the cerebral cortex. It is within the cerebral cortex that these activities occur.

Learning styles. Then we must look at learning styles. How does this person approach learning? Is that learning of a divergent-convergent nature? What about memory functions? Are they short-term, long-term; are there functions for verbal cognitive or for visual spatial?

Sensory. How does this person learn? Is the visual modality effective, the auditory effective, or the kinesthetic? And then, more importantly, how do those three learning modalities cooperate together? How can that student get information via various learning modalities, and then process it so that some body of knowledge can be established? I will not get far into neuropsychology or neuroanatomy, but what we are talking about are parietal lobe functions. They can be tested best with haptic approaches, or tactual approaches. Many learning disabled youngsters see well, utilize their eyes quite well, hear quite well, and even do well kinesthetically, or haptically, but when you put all of those together into one whole functioning, then they have deficits. That is where the literature talks about the parietal-occipital area of the brain as not functioning. And that, unfortunately, does not seem to lend itself to much mediation.

Motor. If you look very closely at learning disabled children, many have very subtle motor deficits, whether fine or gross.

Persistent control. When you look at vocational aspects and start predicting what people can do, persistent control becomes most important. Persistent control is the ability to modulate fine motor movements evenly, slowly, or smoothly. A lot of jobs require that. Assembly tasks, abilities to modulate any kind of machinery, handle a panel board, run a fork lift, all these activities require persistent control. We test it with things like heel-toe walks, finger-nose-finger movements, moving a rod slice slowly, evenly, and smoothly. If students are hyperactive, their persistent control is lacking. When they have behavioral or emotional problems, they often lose persistent control, especially with behavioral problems. And this is important to test for: McCarron and Dial, particularly, have indicated that impulsivity becomes important when you look for vocational abilities.

Muscle power. The next factor that I would like to draw your attention to is muscle power. We know that the way the muscles interact with the nervous system is dependent both on lower brain systems and higher brain systems. Lower brain systems seem to control more of the gross motor activities. The muscle power within these bands, however, is often related to how well the motor band of the cortex functions. If students have anything dysfunctional to the left side of the brain, for instance, their right side of the body will typically be depressed muscularly. Often they also have some difficulty in verbal cognitive areas, meaning that the left side of the brain is not as functional as we would like. That will reduce muscle power to the right side. The best arrangement for work is if one side of the body has a 10% better performance than the other side. These people are right handed. Left-handed people have only about 5% differential. If these are much lower we usually get lower functioning muscularly on both sides.

For several years I did some work in the Dallas ISD with their drop-out program in cooperation with the Texas Rehabilitation Commission. In their youth services project we would get these big kids, looking very, very strong, and we would say, "I know what is wrong with this guy; he is a bully and does not learn."

But when we gave them a hand dynometer, they only pressed 35 kilos with their right hand, rather than the 60 kilos they should have pressed. They looked over-indulged, but this was often because of how their central nervous system was functioning. That is why the New York Physical Medicine Rehabilitation Program found that if their therapists could build muscle power within their brain injured clients, the clients could also gain certain verbal cognitive functions. So if you have LD students you might see lower muscle power and that has to be a consideration when you look at abilities vocationally. You might want to test speed and coordination as well.

Balance: The next factor is balance. Many youngsters who have deficits of a developmental nature will be less able to hold their body in position. Neurologists measure that in many ways, like standing on one foot with eyes open, eyes closed, walking, heel-toe walks and many more ways. We know that when there is a sensory-neural hearing loss, balance decreases. In fact, there is a project going on right now, where we are looking at those youngsters who cannot stand on one foot at all when they close their eyes. Try standing on your right foot, then on your left foot, stand for up to 30 seconds, then switch to your right foot, and close your eyes. This will be hard for you, but if you had any sensory-neuro hearing loss it would be almost impossible. LD students typically have more problems with balance than the usual population, and this needs to be considered when we look at what might be their abilities to behave in the world of work.

Dexterity. Here I am talking about bimanual dexterity, which is being able to use both hands simultaneously in the performance of a single task. This requires one side of the body working in cooperation with the other side of the body. Many youngsters who have learning problems do not have good communication between one side of the brain and the other and that causes their learning to be less. Bimanual dexterity needs to be tested both in the gross areas and in the fine areas; some places test this with nut and bolt assemblies. Other instruments are largely of a neuropsychological nature.

As we look for diagnostics, I hope we will look at three factors: the placement, the verbal-cognitive, the visual-spatial factor. Wechsler tests for all three. The IQ alone does not help that much, but if you look at the various subtests of the Wechsler, you will get a better understanding of what these youngsters are able to do. The Academic Achievement measure is part of the verbal-cognitive factor. The schools typically do quite well on this factor, in my opinion. The Woodcock-Johnson and other more sophisticated measures are probably giving us more information than what the WRAT does, but do not throw away the WRAT. It is still one of the best diagnostic tools we have. It is just not a good prescriptive tool.

Emotional. Emotions involve our personalities. The youngster that has a learning disability, or has some signs of a learning disability, has a higher risk of having emotional personality problems. And we must face it, study after study says social abilities count most on the job. Anybody who works with a mental health case load and tries to get them employed really gets frustrated. So the emotional and personal skills need to be assessed. How does emotional disturbance show itself? We will talk about some answers to that question, symptoms such as depression, withdrawal, impulse control, and anxiety. These will help us look at how we might place students vocationally.

When we understand as many of the traits as we can of a child, from testing, teacher reports, parents' reports, observation, history, and all of it, I think we have to learn as much as we can about that person's emotions. We need to identify whether the student's traits are negative, positive, or just neutral, and then look at jobs to see what traits can be matched to which jobs. That becomes the goal.

JOB ANALYSIS

I do not think we can talk about placing these students until we study jobs very thoroughly within the community. How do you study jobs? You decide what intellectual functioning seems to be required. What language functioning, what thinking, what memory is required? Is it memory for visual-spatial tasks or memory for verbal-cognitive information? What motor control is necessary? What fine dexterity is required? What gross stamina, what balance, what ability to handle stress is required? What about behavior control? What about the ability to receive many things at one time through various learning modalities and process them for understanding?

I will never forget one LD student that we worked with. She finally got placed at a small parts assembly place in the Garland area, and she did so well in her first week there that they decided she should be elevated to another position. In this other position, she was cleaning with some toxic chemicals. She had poor visual motor perception, and when she worked there the first day, she dropped the parts into those highly toxic chemicals. They splattered on her, and consequently, she was fired. She had been elevated to a job for which she did not have the right abilities. That is why we have to do some careful matching.

Vocational counseling should be doing that job match, but, unfortunately, I think we are moving away from that. Maybe we think our hands get too dirty, because it requires us to understand people more concretely, because it means getting out there and knowing what Texas Instruments does and what that hand packager does over in Garland. It means seeing what skills are needed and then going back to look at our youngsters, and making a match.

LD students are very capable in some areas. One teacher told me about a student whose orientation was bad, whose handwriting was terrible, who could not do math problems, but still scored in the 130's for his verbal IQ. This youngster could tell a story like you have never heard and he is only 12 years old. And what is the usual thing that we get caught into? We assume that anybody who can write a story that well can certainly learn how to spell, so he must be lazy. Kick him in his rear end and he will work. Do that and it is like asking an 80-year-old man to jump 20 feet. This is difficult for parents to understand. In fact, some studies indicate that it is easier to teach parents to adjust to their MR child than to an LD child. Employers think it may be even better for them to hire a typical MR student than to hire an LD student, because the MR student is lower in *every* area of learning. With the LD student there is that unpredictable variability.

I saw a youngster who had some learning problems, probably in his right hemisphere, who was given a job as a dishwasher. He had a lot of aspirations, he had good verbal cognitive ability, he wanted to be more than a dishwasher, so you could predict from that placement that he would be unimpressed and unhappy and he would break a lot of dishes. I have nothing against putting people into jobs to learn social, personal, work-adjustment skills, but this student was placed in a job that should have been for a mentally retarded student. He could not do the job from either an emotional standpoint or from a motor standpoint. The hyperactive LD student who cannot modulate five motor movements slowly or smoothly has no ability to operate a control panel, especially if there is any modulation that has to be accomplished.

So our task is to assess those student traits, analyze the job factors, match those traits and factors, and then begin some job try-out. You must understand the youngster very well, and you have to understand the world of work very well; you have to see what that job requires, from a cognitive, visual-spatial, motor, emotional and personality standpoint.

INSTRUCTION

Also, before you put a [illegible] on the job, part of your task is to build strengths and circumvent deficits. Many jobs require only some strengths. We can look to those strengths by looking at what learning modality seems to be the most effective. For that youngster who has good visual spatial abilities, can utilize his hands, can work with objects, can see things clearly and operate on those perceptions, we must teach by demonstration and by visual cues. We must role play, give the opportunity for practice.

The youngster who has a lot of visual spatial problems will learn best when you explain, so talk, give [illegible] study, use good receptive language to teach. There is [illegible] wrong in telling a prospective employer, "When you want to work with Johnny, tell him what you want, show him where he can read it, explain it, give him an opportunity to ask questions about it. When the youngster who is having difficulties in the verbal and auditory area does not understand, do not worry. Show him how, demonstrate, have him do it while you watch, give him more supervision than what you would usually give."

That kind of instruction is helpful to employers. There are ways that we can circumvent deficits, and teach to strengths, but that assumes that we know what the strengths are.

APPROPRIATE EMPLOYMENT

I already talked about this, but I would like to just say it clearly: take care not to overemploy or underemploy the LD student. These students can do more than MR students. Now I really want to stress that. I believe that VACs as a group are very understanding of that, and yet as we create jobs within a community, the jobs that are often available are for the lower level functioning. We are very pleased that business and industry allow us to have training sites. At the same time I think we want to be careful that we do not give the impression to the LD students that these jobs are all they are capable of. We want to also bring in other jobs or clearly point out that this is the training site.

The LD student cannot be advanced beyond his or her abilities by the usual progression on the job, and that is unfortunate. You want to see people move up as much as they can, but some of these just do not have the abilities. We studied a case this morning. This individual wants to be a mechanic, and because of vocational training he has the ability to be a mechanic. But after he works for a company five years and the company says he is doing well, and is ready to supervise other employees, then he is out of his league. "Old Jim," they say. "As long as he was a mechanic out there, he did a good job. Then we put him in charge of some people and I guess it all went to his head. That is when he started to foul out."

I would like to see people grow, but we have to understand as well that there are limitations, especially if they move into another job area that now requires abilities that the individual cannot easily or even predictably gain.

A CASE STUDY

With this I would like to present an actual case; we will just name him Phillip. Phillip was a tall black boy, very attractive, sixteen years old, a drop-out from the tenth grade, and labeled learning disabled. He was sent to a project I worked with for some assessment and possible placement afterwards. I would like to go through his assessment step by step. Usually we start with the Wechsler, and I know for that kind of population the Wechsler's usefulness is very dubious. But for him, first of all, we saw a full scale IQ typically of 75, performance IQ 75, verbal IQ 78, so we knew he was not in the mentally retarded range. Then we looked at those subtests to see if we could see any

differences. There was no difference particularly in verbal and performance, so then we looked at the highs on the subtests. He scored higher on similarities which meant he seemed to have what is necessary for abstract thinking. There was also more verbal cognitive strength than what the 75 IQ score seemed to indicate. Arithmetic was about the same as vocabulary. There was digit span dropping to a degree indicating some memory deficits. Information was low; he did not understand much about his world.

In performance, he had good picture completion; he could really tell what parts were missing. Some literature says this indicates he has good street skills, and that began to tell us something. He did well on picture arrangement, or simultaneous synthesis. Given these scores, he can probably do better when you talk to him than when you show him visually. His visual learning modality seemed to be at least moderately deficient. We could not teach him that well through visual approaches; we might do better with auditory approaches. His memory was pretty good, so once he learned something visually, he could hold it, and use it quite well. What did that mean for teaching? It means teaching it over and over, making sure the decoding occurs, and that the receptive phase is well presented, because once you break through, he will probably hold onto it.

As for academic achievement levels, he read on the fourth grade level, spelled at the 2.5 grade level, and did arithmetic at the 3.2 grade level. Those are all quite depressed scores. For vocational technical training (becoming a mechanic or something of that nature), since he will have to read manuals and pass some kind of an exam, he will probably have a very hard time. Still, he can read words and phrases, he can read danger signs, he can read simple instructions, he can certainly color code, he can use symbols, and he can add and subtract and probably do simple multiplication and division. He has difficulties, however, in anything that requires spelling.

We also did the Haptic Visual Discrimination Test, which looks at associational strengths. He scored a full standard deviation below the mean for associational strengths. He can do what he has been explicitly taught to do, but he will have problems making independent judgments.

As for his muscle performance, he does somewhat better in modulating fine motor movements, which means he may have some control over his emotional behavior performance. His muscle power is good, and he has got good stamina. Balance is down so he needs to work in a well lighted room. Bimanual dexterity is also down.

What does this all say about jobs? It looks like he can do physically demanding tasks but not tasks that require impulse control. He will be somewhat obedient and submissive — not overly so, but he is controllable. His balance is going to be less, so he may need to be careful around moving machinery and things of that nature. His bimanual dexterity will be better with finer things than with grosser things.

Let's look at his emotional functioning. When we looked at an emotional observational inventory from the McCarron-Dial System, we could see that he was doing better than other LD students. His anxiety was less than the mean, as was depression/withdrawal. He gets along with people fairly well, although this has a comparatively lower score. He also feels pretty good about himself. So his emotional coping is one of his strengths. All this went onto a total profile page.

I am pleased to announce that now, two or three years later, he is working at Love Field. He cleans aircraft and has above average job ratings. The concern now is that he not be overly placed. If some big promotion is considered, it might be well to do some reassessment.

Audience: Can you ask employers to contact you before they make a promotion? Surely after three years you are not still doing follow up on him.

Henke: No, I do not think we could. Instead, in our general counseling with employers, we let them know this would be a problem.

I have left little time for questions and I am sorry about that. My main point, in summary, is that you need to match stengths with jobs. You need to see what areas the LD student is strong in and then go for a job that will use that strength.

FROM THE WORLD OF SCHOOL TO THE WORLD OF WORK

SUE ROGERS

Although handicapped students are more and more often finding the vocational training that they need, all too often the transition from the training to the working world remains a problem. Sue Rogers, an agriculture teacher at Stephen F. Austin Junior High, has seen this transition work successfully. After giving her insights and some tips for helping students make the transition, she took participants to the Texas A&M Turf Farms to speak with a previous student, now successfully employed, and his employer.

I have been asked to come and let you know what we are trying to do with our program at Stephen F. Austin. I must admit that as a vocational teacher, I can become very frustrated teaching these kids, but not because they cannot learn. It is just that the way our program is set up I do not see where they are going or how I am helping them get there. At the eighth and ninth grade level students go into the food services cluster, and so when our students are placed on the job, all go into food services. What then is the purpose of the building maintenance or the horticulture program if every student goes into cooking or washing dishes? So, I asked them to let *me* start placing some of them. I have the contacts with people in horticulture, so let me find a place for them.

This year I had a lucky break. I took my class on a field trip out to the A&M Turf Farm, and discovered that Leon Howard, the manager out there, is very interested in handicapped students. He asked me if I thought we could work out some way to put our students to work during the school year, and perhaps even keep them part-time over the summer. Do you see what I mean by lucky?

Responding to this I have put together a unit on working for my students, a unit which could be applied to any other vocational class, homemaking, woodwork or anything. For this program I take them out about four hours a day. My own class is two hours long and I take them out of two hours of their special education classes as well. We are going to have to work out something else for the mainstreamed students so they can get out of some other class time and still be in the program. We plan to put them out for three weeks on this unit and, for state legislators, we need to show how this is a learning experience for them.

One of the other problems that we came up with was whether they should work for money. That is what they will work for when they get out and get jobs and they need to realize right now that this is part of taking care of themselves. But working for money brought up a problem. The employer cannot pay them because they are underaged, and furthermore they are working through school hours. So the employer is going to make a donation to our horticulture club, and we will reimburse these students from that.

One reason I feel this program is so worthwhile is because it gets the students out of their regular environment. Our students have been going to classes all day long for years. They are bored, they are with the same people all day, there is friction, there are problems. A lot of these problems are due to the way our programs are set up. Students go from year to year and day to day in the same classes, with the same people. They have known each other since they started school. They never meet any new people unless somebody new moves in. They never see the other students in the school except in the halls. With this arrangement we are getting them away from school, we are giving them responsibility, and they are learning that they must accomplish something if they are going to get anything out of life. Another advantage is that our students can finally learn what money is and where it comes from. They think that if you need money you get it from Mama.

You see that we will have no trouble justifying this as a learning experience. They are going to have the responsibility of accomplishing something, they are going to have to be there every day, they are going to be on time. They are also going to have to keep up with their work in any classes that they miss.

We are using this as a motivational tool and for teaching them responsibility. Also, if we can get them on this job and get them to see that it is important to work hard at it, then we have the opportunity to keep them placed there. Most of our ninth graders will be turning 16 very shortly, so the summer after their ninth grade classes, they can already be on the job and they will already be earning. Many of our students here in Bryan, if they are lucky and they are good students and there is a job available, can start working in the tenth grade. Most of them must wait until eleventh grade when they can work half a day and then in the twelfth grade they can work all day. So through this program we are giving them an introduction to working and we are motivating them more toward coming to school. After all, if they do not come to school they cannot go to work and if they do not go to work, they do not get their money.

Audience: If you are going to let them work in the summer after the ninth grade, are you going to let them work after school or during school in the tenth grade?

Rogers: That depends on the counselor. If they have a job and they are good students, if they are not discipline problems, and if they have kept up in their studies, they can go to work half a day in the tenth grade, and the eleventh, and then all day in the twelfth. We have one student out at the A&M Turf Farm now who started working half a day, and is working half a day again this year. He has done a good job and has been given a lot of responsibility. I cannot believe the difference in this boy. He is a learning disabled student and was a severe discipline problem when he came to Stephen F. Austin. When I took my class out to the farm for the tour this year, he asked his

employer if he could be the tour guide and he did a fantastic job. He will be out there today to show us around when we go.

I was going to mention another problem that the vocational director has brought me. One is justifying taking them out of school to put them on the job. I have justified this by making it a unit and drawing up all the learning experiences they will get out of it. What we are trying to do is get these students vocationally oriented. You want them to go out on a job, but then you say that they cannot because they need their school work. Well, the special education teacher stood behind me and said that they are in school to learn to get a job and keep it. Without that support I am not sure we would have been able to do this.

We are going out to the Turf Farm today where you will meet this former student and the manager of the farm. Unfortunately my students are not there yet because the owners of the Turf Farm have yet to come up with the financing to complete the arrangements. We are waiting for them to get the trees for us to work on. Before we go, does anyone have any questions?

Audience: Is this Turf Farm connected with A&M University, or is it a private enterprise?

Rogers: It is a private enterprise.

Audience: Is this just a three-week unit that the ninth grade goes through one time?

Rogers: Well, it will be for my program, but mine is just a pilot program. If it works for my program, then we can see about opening it up to all the other programs. Perhaps both building maintenance and homemaking will have a unit where they place their students, though not necessarily for three weeks. We are going to try it for three weeks working a little over half a day. We will provide the transportation, and I will have to have them back at school in time for dismissal.

Audience: Are all of your students in special education?

Rogers: All of them are in special education, except one boy who qualified because he has dyslexia. He is interested in horticulture but the course is all special education, so he took advantage of his dyslexia to take that course.

Audience: There are no regular students in horticulture?

Rogers: No.

Audience: But you hope that when they finish it, that they will stay in horticulture?

Rogers: That is right.

Audience: What jobs do you usually find for them in the Bryan/College Station area?

Rogers: As I said, unfortunately, mostly in food service right now.

Audience: From horticulture straight to food services?

Rogers: No, they go through food services after they leave my program. So when they come out of there, they are placed in the restaurants and cafeterias.

Audience: Are they getting opportunities for jobs in horticulture?

Rogers: Yes, they are. We have four working in horticulture now. A lot of this is because I have gone to the employers and I have asked them to call Bryan High to let them know that they are interested. I know that they are really swamped at the High School; Bryan has a lot of special education students, and they have a lot they have to place. So I can understand that they use the easiest placement and that is in the restaurants and cafeterias. But I hope that I can get mine started, so that when they get ready to go to work there will be that job opportunity.

Audience: I do not understand the structure at Stephen F. Austin. What grade level students do you have?

Rogers: At Stephen F. Austin we have eighth and ninth grade levels. I have one eighth grade class and one ninth grade class, but I will have those students only one time. The next year they will take Building Maintenance or Office Duplication, both VEH courses.

Audience: They get to go through two VEH units?

Rogers: They go through two at Stephen F. Austin, and then at Bryan High they go into food services. Then they are placed after that, ideally in what they are best suited to do.

Audience: Do they have to take all of the clusters even if they take building maintenance first and want to stay with it?

Rogers: Well, if we have a good student who is really definite about what he wants, then he has a good chance of being put into the regular shop classes at Bryan High.

Audience: Okay, they spend three weeks out at the Turf Farm. What do you do with them for the rest of the school year?

Rogers: We learn the skills that they would have to have working in a greenhouse or a nursery. We do landscape maintenance and some landscaping. I have started writing a curriculum but there is no guideline anywhere that I know of. Our program in Bryan is the oldest one in Texas, and people call us to get our curriculum, but there really is not one. We go on a lot of field trips to greenhouses and nurseries, where we meet a lot of people, and that helps us get some placed.

Audience: There are a lot of places in larger areas, that contract yard work out or want their landscaping done.

Rogers: There are two businesses here in Bryan right now.

Audience: I was able to place a youngster on a job like that, at the St. James Company in Houston, and he had no background in horticulture, but he liked to do this. He got his training at home.

Rogers: That is what we have run into here in the Bryan area. If they really know what they want, then it is pretty much up to them to find the job. Our placement people do not really have the chance to place these students, even if they think that is where they belong. They are really tied in by a lot of other things. But the people who are wanting somebody feel an obligation to put somebody in there.

Audience: Anytime you see a school yard where the sidewalks are unedged, and the shrubbery needs trimming, it looks to me like that would be a good place to start in and say, "Do you want my students to clean up your school yard?" There are a lot of possibilities for it, and I think it is fantastic that you have this chance with the stud[illegible] is much better than washing dishes.

Rogers: I know. I often feel useless because we put them through our program and they go somewhere else and I never see any results that come from what I did with them.

Audience: Do you have saleable products from your greenhouse?

Rogers: Yes, we do, but we can only sell them to teachers or parents or other students, or if somebody is driving by and they want to stop and come in. But we cannot advertise at all.

Audience: Is it only plants or do you make plant holders or macrame or anything?

Rogers: We do macrame and mostly plants. In the spring we do a lot of vegetable seedlings. We have one big crop of poinsettias for Christmas usually, and we have foliage plants all the time. We have units on landscape maintenance where we go out and take care of the grounds around the campus for a month or so. If one of the teachers has just gotten a new house, and they say, "Come in and tell me what I need to do, what plants I need to get, and where I need to put them," we will go

out and plot their lot, and give some suggestions, and sometimes go ahead and do some planting.

Audience: Can they pay for this service?

Platt: They can make a donation but we cannot ask them to pay the students.

I think I should add that the reasoning behind having the separate [illegible] is to reach more students and present a wider range. We encourage it to branch out from that. If there is something else they are interested in, they are expected to tell us, but most of our students do not know what they want. If you ask them what they want to be, they often tell you something totally unrealistic.

Does anybody else have any questions? Okay, now what I want to do is take you out to the Turf Farm where we will meet the man who has given us this opportunity. He has left the door wide open for us to make schedule changes or whatever we need to do to get these kids to work. And like I said, it could be applied to any field, if you can find an employer willing to work with you.

WHY I HIRE THE HANDICAPPED

BOBBY PLATT

What insight into the employment of handicapped students would an employer give to vocational educators? Bobby Platt is one of those rare individuals who has qualifications on both sides of the training/employment fence. On the employment side, he has been manager and co-owner of Sammie's Bar-B-Q in Fort Worth for six years. On the training side he has worked for over ten years in education. In this presentation he gives his insights into finding employment for handicapped students and the reasons for the success and failure of handicapped students on the job.

I have several things that we are going to kick around. I think for you as school teachers working with handicapped students where the end result should be a successful job placement, one of the most important things is to find out what is involved in the particular job you are looking at for a particular student.

I can relate this back to the food service business. Suppose I ask what a bus boy does. All the things you think of revolve around the same principles of working around the tables. Bus boys carry dishes, they empty ash trays, wipe tables, and so forth. But really they do a lot more: ours even make the cole slaw. Who would think of that as being a common responsibility of bus boys? We will get back to that later. I think you are going to have to know what the job duties are and what skills this student is going to need.

A student may come to an employer without the VAC or counselor to place him. The employer may put that student washing dishes because he thinks the student can do that work. When I put a student washing dishes, it is a step up from the bus boy. During the week nights we have our own order to train bus boys to become dishwashers, and they have a trial run. After dishwashing, they work on a cutting board. When they get to the cutting board they are making $4.50 an hour. The man on my cutting board now works on Monday, Tuesday, and Wednesday nights. He is a senior in high school and is doing a good job. We started him out as a bus boy. He moved from there to the dish washer and on up.

We also make a conscientious effort to get together with parents. We call them and ask them to come and see what the student does at work. We do not want them to be ashamed because they do not understand their children's work.

We are going to look at three people, one very successful, one very unsuccessful, and the other one in the process of going either way.

The last is Jack. I think he is going to make a good employee and a good student in school. I hope so. Jack is 16. When Jack first came, he came on his own and I thought that he had more ability than he really did. I started him out as a dishwasher and found that I either had to fire him or move him out into something he could do, such as being a bus boy. Our bus boy quit and so Jack got another start. But I want you to know some of his duties. Jack works four nights a week. His jobs are almost totally different on our busy nights. On Wednesday and Sunday we have other jobs that Jack is solely responsible for. For example, he picks beans. It sounds like nothing, but picking beans is important. Two years ago it cost us $192 when our bus boy did not pick beans properly and a rock broke a customer's tooth. We are a selfowned place and we have added on a lot of rooms, and one of Jack's jobs is cleaning our warehouse where we keep our extra Coke containers and that sort of thing. He also makes slaw on Wednesday night. When you make slaw you have got to know how much a pint is. You have got to know how many four handfuls are; how much two-thirds of a bowl is; and how much one-half gallon of pickles is. We put in a pint of oil, one-half gallon of vinegar, and four handfuls of coloring (carrots mostly) and salt and pepper. When Jack first started he reversed it every week, one-half gallon of oil, one pint of pickles. It was terrible — like eating flavored motor oil. We have that down now. The only thing we are still working on is that he wants to put too much coloring and salt. Little things like this can be solved by knowing in advance what kind of training is needed for this student. All of this sounds small, and it is, but it is important.

To get into another area, last Christmas we cooked about 3,000 turkeys and hams. When the turkeys were brought in we had 20 or 30 a day cooking at one time. Jack had to take each turkey, put a metal tag with the weight on it, and sort them to decide how long the turkeys should cook. It was a very big responsibility.

We have two ice machines and we empty each one every night into a bin. This is another job of his. In the dining room we seat about 100 people. There are no carts and so when he brings the dishes it is all by hand. He empties garbage cans. He changes rolls of paper, mops the dining room, cleans the walk-in. He cleans the shelves and puts everything back in place. This may not sound like much, but it is. There are 400 lbs. of brisket and other things that he is responsible for moving and putting back up.

In a place as old as ours, we have to make a very concerted effort to keep it as clean as possible. Even when it is at its cleanest it does not look like much. But we take care of our place; the health reports we get are all very good.

I really do not know how Jack is going to do. The biggest problem we are having with him is transportation. He is old enough and he has a driver's education class. He has even passed his written test. But, at the present time, he has taken his driver's test eight times. He is getting discouraged. I said, "Why don't you get your dad to take you out and let you get some practice driving."

He said, "I am getting all the practice I need driving back and forth to take the test." And he is right.

Jack is a good kid, not that different from any other kid. He will attempt to do any job that we give him. He was extremely shy, though. You would not believe the progress he has made, but he is still very shy. He is proud of his work. If he pick[illegible] a pot of beans, I can guarantee that you will not get a r[illegible] in it because Jack does a good job.

What is Jack going to be doing five years from now? His abilities are limited to a certain extent, but I want to look on the bright side. We think about his job as picking beans, cleaning shelves, mopping the floors, washing trash cans, I could make the list this long. If I had somebody like yourself to lean on in training him things would be lots better. What I am saying is that we sometimes take for granted that we know the job duties of a position.

Every employer has a unique situation. Our business is unique because we are so old. We peel potatoes by hand; we make onion rings by hand; we make slaw by hand. We pick our own beans. Everything we do is done right there. Everything we sell, we prepare ourselves. But I could write a list of things a bus boy has to do and I think any employer could do the same thing. He could give you a list of items of things the student must be able to do. Do not be confused into thinking you know what is required of the student. Ask the employer instead.

We looked at Jack. We do not know what is going to happen to him. Well, another handicapped man has been at Sammy's longer than I have. He is 34 years old and has been a dishwasher for 12 years. Now if there had been a special education program at his school, he would have been in it, but he probably does the best job of any dishwasher anywhere. In the last 12 years he has missed only two days. That is one good reason I hire the handicapped.

We pay Willy $239.50 a week. That is $12,454 annual salary. He gets a bonus every year of $300. He has gotten this every year, and he is worth it. He also gets to eat[illegible] meals a day and he works six days a week. He schedules everything. If any of us went in to Willy and said, "We are kind of behind, could you help me do something?" he would not be able to operate the rest of the day. He operates at maximum now, but what he does he does well. The other employees know this. He has been there longer than any of them.

There is a lot of harmony among the employees because everybody does the job they are responsible for doing. There is a good working relationship. We are an integrated mix; we have Vietnamese, blacks, browns, whites. It is like a mixed family. Willy is appreciated because the other guys have been on jobs where there is a new dishwasher every week. They know that as employees they will have to wash dishes if the dishwasher does not show up for work. In the back there is good harmony with Willy and now Jack is getting in this group. He is still in the dining room, but he is coming out of his shyness now. Willy eats breakfast and cooks breakfast for all of us, too. Then he eats a noon meal about 2 o'clock. It does not cost him anything and he gets whatever he wants except candy or beer.

I figure $4 a day on meals is his equivalent. Over a year, that is $1,248. We also pay $20 a month on his insurance. That is $240. If we figure that up, it does not look too bad for a salary. Of course, he has to work six days a week, but he gets a week of paid vacation. That is a pretty good salary. This is a success story. He has been there 12 years and, unless something unforeseen happens, if you come up 10 years from now he will still be there. I honestly believe that. For employers this is one thing that is good. He has been absent two days in 12 years. He was probably sick. If you have a group of people like this filling a spot where you would usually have a once-a-month turnover, this is important.

Willy has a string of job duties for every day. He knows exactly what to do, he is programmed out. You might see him sit down for 30 minutes, but you do not have to worry about him doing his job. I wish you could meet Willy. He is a tremendous guy. He has a job that he is going to be doing for the rest of his life, but he does a good job at it. He is probably going to be happy and he has fewer worries than a lot of us because he lives well within the means of his lifestyle.

The last of my employees is the opposite of Willy; he is named Harold. He came from a food service program in Fort Worth. It might have been some kind of adult program or federal program. He was about 22. His responsibility was to do French fries, onion rings, potato salad, and cole slaw. Harold got so far behind the first night that he was hopelessly confused. He began to pick up with practice but then the ultimate disaster in Harold's life happened, He had a flat coming to work Wednesday. He did not show up until Friday. He did not call or anything. So we set out a game plan for Harold. Harold's big problem was not having the skills to tell us when something went wrong. Two months later something happened to his car on the freeway and for four days he did not show up for work and that day he came in like there was nothing wrong. So I had to let him go. He did not know what to do when he had car trouble. Harold got no support at home. Parents want special education students to get paid more than other students. We call mom and dad and say we have something that will be a benefit to you, your child and to us. He is not just washing dishes. He is learning to get here on time, learning what to do if he cannot get there. If we could have had someone like you to work with him, we could have made a list of things to do when something went wrong with the car.

We have looked at three people, one that did not work out, one that really has worked out and one that may work out. We hire handicapped people if they can help us make money. We fire them if they cannot help us make money. Any employer will do that. They want someone they can train. They want you to send them someone with skills, primarily with social skills. They have to get along with people. They have to take criticism, constructive criticism. We have a book and whenever we hire

somebody we type in their name, social skills, what date we hired them and what we hired them for. Whenever we fire them, we do the same thing: their name, why we fired them, and the date. Why do you think most of them get fired? In the last eight years, I think I counted 46 people that I have fired. Why do you think eight out of ten of the ones fired were fired? Either they could not get along with the people they were working with or they did not show up. Out of those 46 there were only two who were fired because they could not do the job. One of them came in to work the register and could not even make change. That is one situation that VACs can help out with. If you know the student cannot do it, tell us. We will find out anyway. Your student might not know how to operate this new-fangled computerized cash register, but he does need to know how to make change.

Let me try to round it up. Why we hire the handicapped — they have got to be of benefit to us and our company. They have got to be able to make us some money. You can give them the skills that they need, you can give them social skills, and you can give them [illegible]al job skills. Ask your employer to give you some job tasks. Write them down. Take that list back and give it to the students. Say, "This is what you will need." Learn about the job. Find out exactly what it entails. Every job is different, in every business.

So looking at all these things, I must admit it is not always good. You have failures; I think you need to let the employers know that. You also have a chance for success. You have a chance to see success in a different view than you have ever seen before. If you [illegible]re a VAC, you will see the success at the end of the road — successful job placement.

THE INVISIBLE BARRIER

BOB ALCORN

What is it like to be on the other side of deafness? Deaf since the age of four, Bob Alcorn brings his own humorous — and poignant — experiences to this presentation of the experiences of deaf people, both in education and employment. Mr. Alcorn is currently Technical Language Facilitator at the Texas State Technical Institute in Waco.

Good day, ladies and gentlemen. It is really an honor to be here today and to share with you my experien[illegible] good and bad, as a handicapped person. I have been give[illegible]nty of time to prepare my speech today; I prepared man[illegible] destroyed many. Some were too militant, and some we[illegible]ellow that they did not really reflect my true feelings [illegible]ect of being handicapped. I have told myself that I must not turn off the audience, and yet my conscience tells me that I cannot let you feel too comfortable. Today as you hear me out, please listen with an open mind, and leave your biased feelings, if you have any, in the far corner of your mind.

Throughout history, the handicapped have been sequestered into institutions, away from the public. Today, the public is becoming more and more aware of the handicapped; but ignorance and fear of the unknown combined with bad attitudes have been a problem. I remember, when I was a young boy, my brother introduced me to one of his instructors, saying, "This is my brother, Bob. He's deaf."

The instructor acknowledged my presence, not with a hand shake, but with a hurried head shake and an exit. Before he left, there was a brief exchange of words between the two of them, and I was later informed that the instructor wanted to know if my deafness was catching! Such ignorance from a child I can forgive; but from an instructor?! Lord, give me strength! I wish deafness were contagious; I would throw it off on all of you.

Perhaps, even now, some of you feel the government and society are providing sufficiently for the handicapped. Let's pause for a moment and ponder how and when people become handicapped, and who are the unfortunate ones stricken with such misfortunes. People become handicapped any time, from the moment they are in their mothers' womb until much later in life. For instance, a mother who has German measles may give birth to a child with a wide range of handicapping conditions, like blindness, deafness, mental retardation, cerebral palsy, deformities, and sometimes multiple handicaps. German measles is not the only cause of handicaps. The umbilical cord being wrapped around the baby's throat long enough to cut off the oxygen supply can cause brain damage; automobile accidents, high consistent fever, spinal meningitis, plane accidents, accidents on the job, and many, many more. Young people, middle-aged people, older people are stricken with diseases or accidents that leave them handicapped. Now, ladies and gentlemen, this could happen to you, to your loved ones, to your friends, or your neighbors. If such a misfortune should occur to you, can you honestly say that the Government and/or society will provide for you and look after you? If you think so, good luck, because you definitely need it! But if you do not think so, then I strongly encourage those of you with authority or political power to influence those in a position to help the handicapped to do so. It is sad that most people do not do anything until it happens to them, or to those that they love and are concerned about.

I have many friends who are handicapped, not only from deafness, but from blindness, mental retardation, confinement to a wheel chair, and cerebral palsy. I have had rap sessions

with them, where we would discuss our handicaps and the frustrations caused by them. All of us have faced some discrimination relating to education and employment. It would take a book to relate to you all the discussions that we have had, so I will not do it today. It is ironic to me that most people ask questions concerning sex. One blind friend told me that he has often heard such remarks as "Too bad, you missed a beauty, right there in front of you." Whether that was in a joking manner or not, it was in bad taste. Being blind is bad enough — never mind the remarks that remind that blind person that he or she is blind, and what he or she is missing. Why stick in a knife and twist it?

Another friend of mine who is confined to a wheel chair was asked how he managed to have sex with his wife. He answered, with good humor, "Thank God, my wife is the dominant type." Well, I know that is funny, and he and I have often laughed about it, but some handicapped people do not take personal remarks lightly. I have built up a thick skin to remarks such as these, and I swish them around and throw them right back with equal vigor to the person who hands them out. You can joke with me; I can take it. But be prepared; I will throw it right back.

I was once asked by a friend of mine, "How do you tell your wife at night with the lights off that you love her?"

I was in kind of a sarcastic mood that time, so I answered, "Have you ever heard of the Yellow Pages?" The body language that I received in response to my answer was one of puzzlement, as if I had gone off the track or something; so I said, "Well, I let my fingers do the walking." I can take it; I can throw it back; and I know that lady was genuinely curious. She was not being rude; she was just unfortunate I was in a sarcastic mood.

I recall, when I was in college, walking to a class with a friend, and being so engrossed in conversation that I was not paying attention to what was in front of me. And it happened that I glimpsed from the corner of my eye some kind of movement out of the ordinary. I looked over, and I saw somebody falling backwards. Well, of course I reached out to keep that person from being introduced to the sidewalk, and it so happened that the person had cerebral palsy, pushed me back, angry, and said, "You *!@$#%! I'm not exactly helpless!"

Well, that stung, because I am handicapped myself, and I do not believe the handicapped are helpless. It just happened that instinctively I reached out without realizing that the person had cerebral palsy. But then, again, I cannot blame him for his attitude, what with all the attitudes going around that — "Oh, he's deaf, or he's handicapped; he's helpless. We're going to have to show him a little pity, give him a little charity." We do not need it!

This same person and I later became friends. He majored in math, but the last I heard he did not have a job. That is sad, because he could have had good rapport with Einstein. He would have been an asset to anyone who would hire him, but he had cerebral palsy. Sorry! Out of luck! Discrimination is still here today; it is still practiced. It is not as frequent as in the past, but it is still here.

I can remember when I worked as a tool and die machinist in Dallas. I noticed an advertisement for a tool and die machinist in the paper. The qualifications were like this: High school diploma; 18 months experience; the ability to set up and operate manual and automatic lathes; must be a class A operator; must have tools and transportation. Now, the pay was a dollar more an hour than I was currently earning, and I knew that I passed the qualifications with flying colors. I had three and a half years experience; had been a class A operator for two and a half years; I had over a thousand dollars worth of tools, my own transportation; I had graduated from high school and had one year of college; I could set up and operate not only automatic or manual lathes, but also milling, threading, and grinding machines. I told my hearing friend about my plans to go and apply, and he wanted to apply too — well, who could turn down a dollar more an hour? So the next day (ahem) we called in sick, and went to apply. My friend had his interview first, and I waited. I had already filled out my application. When his interview was over, he came out, and as he passed me, he gave me the "no luck" sign. I figured he did not get it; I knew he did not meet the qualifications. So I went in for my interview. Fortunately, he was an easy person to lip read. Our communication went smoothly until he looked down and said something. I had to say "Pardon me, Sir, I'm deaf, I can't hear, I depend on lip reading."

That was the end of my interview.

He said, "Oh, we can't hire you. Our insurance policy doesn't allow that. You can't work in a dangerous or hazardous area."

I was ignorant of the laws at that time. If I had known my rights and the law, I would have taken that to court, and I would have gotten a lot of money off that; but I was stupid, so I tried to convince him to take into consideration my three and a half years accident-free work experience, and he was blind to them. He had a handicap, not me.

I finally decided, in 1970, to go back to college and finish my education. Why? Maybe fate planned that I should be so frustrated for many years and put that realization in my mind: "I gotta go back to college," so I went back. I got my BA in English. I still wonder if it was worth it, just a piece of paper. I have gone to the deaf school in Texas and applied for a job teaching deaf children, not once, but four times, and each time I have been turned down. I do not have a teaching certificate in deaf education. It is sad that many of these deaf schools will hire either hearing people or deaf people who cannot sign. They say, "You have your certificate? Fine. You have to learn sign language within two years." It takes more than two years to learn sign language! What happens during those two years for those children? Nothing! They are denied the right to a proper education.

I have nothing against hearing people teaching, if they know how to sign and communicate with those children in their own native language. That is American Sign Language. Many people do not. What really aggravates me is this: I have a BA. I do not have a certificate. I only need about nine hours to get it. Nine little hours. They still turned me down. I can sign. I can communicate with the children, whether in American Sign Language or Signed English. You have to be honest; I would do a lot better job than one who cannot sign, even though I do not have a certificate. Honestly, how many of you learned to teach on the job? Actual experience is your best teacher. I am now getting my Master's, because the law says you have to have it.

I used to have a furniture business. I had customers come in: "Ble-le-le."

"Oh, excuse me, I can't hear; I read lips."

"Well, I'll see you later!" and leave.

My business folded. My prices were the cheapest in town, but people thought, "Uh, if it's that cheap, there must be something wrong with it." I bought the same thing as my competitors did, and I put down the prices, and people thought: "Oh, I don't know about him. He can't hear. He probably doesn't know what he's doing."

Deaf people have to buy telephone devices called TTY's. — Actually, they want them. Many cannot buy them, since they

cost $400-$1000. Did you know that Alexander Graham Bell invented the telephone while trying to invent a device that would aid his deaf wife? Instead, the telephone has become an object of anguish for many deaf people because they cannot use it unless they can shell out the money for a TTY device. Many distributors want cash for these gids; they will not take installments. I have a TTY. I love it. I do not care if people take my money; I will give it to them, and they know it. Years ago, when calculators first came out, they were $80 and up. Now you can get those same calculators at a steal, $12 and up. But TTY's? No way. They are not going down. They are spiraling in expense at an unbelievable rate. If the calculators go down, why can't the TTY's? They are no more complicated than a calculator. The calculator has a memory bank; they are smart. The TTY's have nothing; they just print what they get.

I would like to recite a poem that I have interpreted to reflect the feelings of a lot of handicapped people. I know, perhaps, that you would interpret it differently. That is fine; everyone is entitled to his or her own opinion of it, OK? The poem was written by Edwin Markham, and he quotes from the Bible: "God made man in His image, in the image of God made He him."

"Bowed by the weight of centuries he leans, upon his hoe, and gazes on the ground,
The emptiness of ages in his face, and on his back the burden of the world.
Who made him dead to rapture and despair? A thing that grieves not and never hopes?
Who loosed and let down this brutal jaw? Whose was the hand that slanted back this brow?
Whose was the breath that blew out the light within his brain?
Is this the thing the Lord God made and gave to have dominion over sea and land?
To trace the stars and search the heavens for power? To feel the passion of eternity?
Is this the dream He dreamed Who shaped the suns and marked their ways upon the ancient deep?
Down all the caverns of hell to their last gulf, there is no shape more terrible than this,
More tongues with censure of the world's blind greed, more filled with signs and portents for the soul,
More packed with danger to the universe. What gulfs between him and the seraphim, slave to the wheel of labor?
What, to him, are Plato, and the swing of Pleiades? What the long reaches of the peaks of song,
The riff of dawn? The reddening of the rose? Through this dead shape,
Humanity betrayed. Plundered, profaned and disinherited cries protest to the judges of the world,
A protest that is also prophecy. Oh masters, lords, and rulers of all lands,
Is this the handiwork you give to God, this monstrous thing, distorted and soul-quenched? How will you ever straighten
This shape, touch it again with immortality? Give back the
Upward-looking and the light, rebuild in it the music and the dream,
Make right the immemorial infamies, perfidious wrongs, and inimitable woes?
Oh masters, lords, and rulers in all lands, how will the future reckon with this man?
How answer this brute question in that hour, when whirlwinds of rebellion shake all shores?
How will it be, kingdoms and kings, with those who shaped him to the thing he is, when this dumb terror
Shall rise to judge the world after the silence of centuries?"

This poem, I feel, reflects the feelings of a lot of handicapped people of whom we take advantage. And sad to say that people who are "normal" overlook the fact that people who have handicaps are normal. They just have something that may impede them from getting what you normally can take. You think about this. We are not asking for charity. We do not want pity. I have gotten through life. It was hard; it was rough. But I have made it to where I am, and I am still climbing. I know a lot of people who are stepping on my fingers as I try to climb that ladder. That is fine; I may pull them down.

I have been lucky to work for some people who have the same feelings and views I have, but there are thousands of people out there who are on government checks. Government checks? You could not feed a dog with that money. I am going to stop now and give you a chance to ask questions. I will answer them if I can. If I cannot, you can keep it in your mind and ask somebody else. Do you have any questions?

Audience: Your presentation deals with a lot of things that normally people would not experience, yet you mention that we are all handicapped. Well, in a way, we all are. We all have different handicaps. I am brown, and I have dealt with a lot of things that people with blond hair and blue eyes would not. I am not in this situation because I chose to be; I was born with it too. But to relate to people who can make some changes, we are going to have to go along with it. To be militant, to try to get our rights in accordance with the Constitution will not solve any problems. If we do, people will get more turned off. All of us are going to have problems, and all of us are going to have to find ways to come up with solutions. You have had problems; I have had problems; and I am sure that goes for all of us here. Can you tell us any other invisible handicaps or invisible disabilities that we might need to consider, and what we can do about facilitating efforts to bring about some changes for those people?

Alcorn: I have here a book written by Frank Bowe, called *Handicapping America.** This book will answer many of those questions. It tells about all the varieties of handicaps in America and the problems these groups face in our society. He is a really good author; he is not militant, he is just honest. This book is rich and rewarding to read. I would recommend that you buy it.

Another way I could answer your question would be to say, I know that black people, for instance, are handicapped. Brown people are handicapped. A lot of people are handicapped. We need to give some positive feelings for these people, to have rapport with them, make them feel comfortable. If they feel comfortable, they can help each other.

Audience: We, as teachers, would like to know some techniques to work with non-hearing people, particularly in a lab situation.

Alcorn: A lot of deaf people, right now, are being mainstreamed into the public schools. I think teachers should grab the chance to learn sign language first. That, to me, is the basic for educating them. If you cannot communicate with them, forget teaching them.

*Bowe, Frank. *Handicapping America.* New York: Harper and Row, 1979.

Most deaf people use American Sign Language. You see me right now using Signed English, which structures sentences in my signs. The majority of deaf people, however, do not sign in an English structure. They use American Sign Language, which is like drawing pictures in the air. There is a lot of pantomime [illegible], there is a lot of body language. If they could learn some sign language, they will benefit from it, and, believe me, so will you! You will learn how to relax, and let your body show your emotions. Sign language takes anywhere from a few months to ten years to learn. It depends on the individual, on how much enthusiasm that person has for learning it.

Audience: Where is training available for learning American Sign Language for lay people?

Alcorn: There is training available in Austin. I teach it in Waco at McLennan Community College. Some of the churches teach it. You could probably go to some of the universities in your area and ask if they know anywhere that sign language is taught. A lot of universities will know of community colleges. My interpreter, Mrs. Kanda, got a lot of experience working with the deaf while she was a Coordinator of Deaf Ministries for the Baptist Church in Amarillo, so a lot of churches give that kind of information. Also, the statewide project for the deaf has a listing, and the Texas School for the Deaf, in Austin, might give you that information as well. TSTI may have a lot of information, too.

Audience: Do you recommend American rather than English?

Alcorn: It is harder to learn American Sign Language. But you are fluent in English already, so once you learn the concepts and structure of sentences of American Sign Language, then you can use the same signs and move them over into an English sentence structure. So I would recommend learning American Sign Language (ASL).

Audience: I do not know if Bob is aware of it or not, but in Big Springs we are opening the Southwest College of the Deaf this fall. This will be the only college in the southern part of the United States. There are only two others in the United States.

Alcorn: The other two being Gallaudet in Washington and the National Technical Institute of the Deaf in Rochester, New York. Whether the one here in Texas succeeds or not is going to depend on the government. Often the government mandates that some school or institution provide services for the deaf, gives them a lump sum of money, says, "Get started," and then forgets about them. We will have to see what happens in Big Spring. I hope it succeeds, but it will depend on the funding.

Audience: You speak so well I think that I could understand you without your interpreter. Where did you learn to speak? Did you have a therapist who taught you?

Alcorn: No. I had already acquired the English language, when at the age of four and a half years, I got spinal meningitis. I had the language once, and I still remember it.

People who were born deaf have never heard it. You may know of the fight now between lip reading and sign language groups. It has gone on for years and years and years. Both groups are good, yet they have difficulty merging to use what we call total communication — signs, speech, and lip reading. I am using total communication. If you read literature like *The Deaf American*, *The Volta Review*, and *Alexander Graham Bell*, you will see the biases. Alexander Graham Bell's organization favors oralism; the *Volta Review* is somewhere in the middle, but tends toward oralism; and *The Deaf American* tends toward manualism. But is has been proven that when a person uses total communication, that person understands seventy percent or more. Lip readers only average thirty percent! I get almost 100 percent with total communication. It depends on how hard I am concentrating.

Audience: What things do you feel made the most difference as far as helping you develop positive self concepts, and what things would you suggest that teachers do to help their students? I am sure a decrease in prejudice would help many handicapped people, but some of you have succeeded. We need to learn from the experiences of those people who have good self concepts.

Alcorn: Mine is from age. Twenty years ago, you would not have talked with me. I had a real hot temper. I did not like people telling me I was deaf. I did not like people asking me, "Can you read? Can you write?" Now people say, "Can you read?" and I say "No, but I can write!" It does not bother me any more. It is their problem, not mine. I can read, I can write, and that is great. So my self-concept came with age and experience.

But in school, when I taught those deaf children, I also taught hearing children, and I taught these children about the deaf. I taught them sign language. I told them, "When you learn sign language, then we can do these things," and "these things" were fun things, things they wanted to do. Then, when they started learning, they wanted associating with the deaf children, and it helped the two cultures interact and get along. The deaf children then [illegible], "Hey, I'm somebody. He wants to learn my language." And that helped.

Again, I recommend this book (*Handicapping America*, by Frank Bowe). It will help you. It will give you a lot of answers.

NOT HANDICAPPED — MERELY INCONVENIENCED

RANDY GALLAWAY

Would you consider having an electronic right arm and a metal "hook" left hand to be a handicap? Randy Gallaway doesn't. At age 18, while tightening a transformer bolt, Gallaway was jolted by 13,000 volts of electricity. After undergoing surgery and skin grafts 38 times, Gallaway returned to College to study engineering and later graduated with an M.A. in Theology. Back to the Vocational Special Needs Conference by popular demand, Randy speaks about his "inconvenience" and his adjustment to the "Boston Arm," a recent development in the field of electronic prostheses.

After my accident I was rushed to the hospital in terrible shape. I was given a tracheotomy so that I could breathe. I had already gone into convulsions and was in deep shock by the time that they got me there. After a few hours of emergency surgery, the prospects were that I would not live. They told my family that if I could live forty-eight hours, I might have a chance. Other doctors were called in to help and I survived the 48 hours and another 24 and then the big crisis came. Gangrene set in and the doctors knew they would have to amputate my right arm and my left hand. They knew that I would probably not survive the surgery.

They took me to the operating room and my doctor called in five other specialists because they feared that my internal organs had been damaged. The anesthesiologist said that the anesthetic alone would kill me and there was nothing to be done. Dr. Gracia couldn't stand for that kind of reasoning and he began to argue and the argument became so heated that Dr. Gracia grabbed the other doctor and began to shake him and say, "Put him to sleep, put him to sleep" and knocked him to the floor and began to convince him with his fist to put me to sleep. Dr. Gracia won the argument, obviously, and they did operate and were able to complete the surgery just in the nick of time. That was the first major surgery in the series of 38 it took to get me patched up again.

During that year and a half in the hos[illegible]ere some depressing times. There were s[illegible]s when I wondered if it was worth it to live. In fact there [illegible]ne day when I prayed and asked the Lord to please let me die. I am a Christian and I believed that I would go to heaven and it would be much better to be in heaven than to be in this severe pain. There was a nurse there in the hospital that day taking care of me and she had the keen insight to pray a simple prayer. She overheard me praying, "Lord, just let me die," so she prayed, "Lord, either give him the grace to bear it or ease the pain." At that instant the pain decreased and it was never that severe again. I do not understand that medically but I know that it happened and I am grateful for a nurse named Becky Short who happened to be standing beside my bed that day and brought a miracle into my life.

I was a year and a half in the hospital and finally completed all the surgery and was getting ready for artificial arms. My hopes were kind of exaggerated because they were beginning to invent electronic arms about that time and I expected to be a six million dollar man. I was going to go to California and get my new arms made and be able to do everything. When I got to the UCLA Rehabilitation Center, they told me, "No, those do not work very well. If we gave you an electronic arm it would work about a week and it would break and you would have to send it off to get it fixed."

I decided, "I don't need that. What do you have that works?"

They prepared a set of artificial arms that used a rubber-band and a strap around the back. If you move just right your hand will function and when you relax just right your hand will close. I had about three weeks of actual therapy training at UCLA and they taught me how to do some things. It was pretty good training. I did not learn completely how to dress and do everything but I got started and learned some techniques.

I came back home to practice and work on it and spent that summer getting patched up and learning how to write. I went back to work in a different part of the factory, this time in the drafting department doing some bookkeeping and different records and eventually learned to do drafting again. That had to be part of my expertise if I was going to be a mechanical engineer. I talked with vocational rehabilitation, made arrangements to get some help going to college and that fall entered the University of Texas at Arlington. Learning to do the drafting for a grade and learning to carry briefcases and books and devising a slide rule that I could work was a phenomenal year of my life.

I was a very shy person psychologically, even before the accident, and the accident plunged me even deeper into self-consciousness and shyness. I would walk across campus feeling that every eye was on me and that everyone was looking because I wore two hooks and people notice two hooks. Luckily I found a group on campus that I got involved in where I was accepted, encouraged and given opportunities to experiment doing things and where I could drop something and not be laughed at and not feel embarrassed. During my five years in college, my experience w[illegible]e Baptist Student Union was a turning point in my life.

During college I became pretty good at my studies. I studied very hard. Part of my motivation was to prove that I was still alive and could still do things. I studied probably twice as hard as the other students because I wanted to excel and be the best that I could be. I was encouraged by my family to do all that I could. It did not have to be an A, but just all that I could do. I did that and there were some A's that came along.

Upon graduation I had an interesting opportunity. I could either go on with my professional career in engineering or take a

year out to do a special project working with the Baptist Student Union group. They had meant so much to me that I took a year off to do that. My year became two years and then I decided that was really what I wanted to do with my life. I had been feeling intuitively, for several years, a growing interest in that so I went on and got a master's degree in theology at Southwestern Seminary. I am in full time student work now. That is kind of a brief sketch of what has happened in my life.

I want us to talk back and forth about the different crises in my life, the crises that you face in helping others as you deal with people with difficulties. The title of my seminar today is something about merely being inconvenienced, not handicapped. The reason that I put that title on there is because we all have certain inconveniences. Some of you have more trouble skiing than others. Some of you have more trouble in studies than others. There are some things that all of us have difficulties doing. Some have difficulty relating to new people. Rather than use the word handicapped I like to use the word inconvenienced. It just takes me a little longer to do some things than other people, but that does not mean that I am less of a person. That does not mean that my life has less value than your life or someone else's life. Do you have some questions?

Audience: Your inconvenience and mine are very much alike, but there is a difference. Yours was an accident and mine was congenital. You just indicated that you worked exceptionally hard afterwards as far as your education was concerned. Do you think this was due to the accident itself or due to the fact that you might have had the feeling that it was necessary for you to do so in order for you to be accepted?

Gallaway: I think it was more of an internal thing for me. It was not so much that others would not accept me but I wanted to prove to myself that I could do it. I did not want any sympathy or any extra help from the teachers. I wanted to do it not as a rugged individualistic type attitude but just for me.

Audience: Considering the structure of the school system at that time would they have ended up putting you in a special education class or would they have left you in a regular classroom?

Gallaway: I do not know the law at that time but probably I would have been put in a special school. I think I would have done better in a regular school learning to cope. There is a lot of frustration involved with any difficulty when your friends are doing things and you cannot do that particular thing. You get embarrassed and frustrated. Some of the feelings — embarrassment, disappointment, frustration — were difficult to cope with. People who were my friends became my greatest resource at that point. Friends helped me participate in what they were doing without being overly sympathetic.

Audience: What was your psychological feeling toward yourself after this happened?

Gallaway: It took a while for it to hit me. During the months in the hospital I think I had a little bit of a naive approach. Life will go on. I'll just get put back together and have artificial arms. The year and a half of waiting and all the surgery began to weigh on me, and then getting the new arms and finding out they did not work as well as I had hoped and learning that it took me ten times longer to do some minor tasks were real points of frustration.

Audience: Did you have to go back and completely finish your senior year or did they come in for those two months and help you finish it up?

Gallaway: They did an interesting thing. They thought I was going to die and my grades were good enough in high school that they said well, he just lacks six weeks or two months so we will just average it out and let him graduate with the class. So on the night of graduation they bundled me up with bandages from head to toe and put a graduation gown on me and I walked across the stage. I barely made it and then I went right back to the hospital. But I was allowed to graduate, and that was good for me.

Audience: Would it be easier, for say, Shirley Price, to accept her handicap, because she was born that way, than it would be for you?

Gallaway: No, I think it would be more difficult emotionally. I will share my feeling. It is easy for me to say, "Well, I was not born like this, I was injured. I am really a whole person." Someone that was born with a difficulty, it seems to me would have a more difficult time. What do you think about that, Shirley?

Price: I disagree with you. I feel that being born with a disability is like being born with green eyes. I have not had to go through the psychological trauma that you have gone through — wondering if I am going to live or not. I knew I was going to live. The only thing that I can say that we share is trying to find ways to do things differently. I think that I might have found them out quicker than you because of the time element.

To give you an example, you have the arms. I do not want them because I feel I do not need them. I think this is true with any disability. A person who loses something — if you lose your home because it burns down — that is something traumatic. You have gained these things, you have earned them, you have always had them with you. Now all of a sudden they are gone.

Let me give another example if you will allow me the time. There is a little girl in Houston that I have been trying to help out. She had an accident and lost both of her arms. She is three years old and by the time she gets to be 20 she is not going to remember what it was like to be three, nor will she remember the pain. Right now Texas Institute for Rehabilitative Research and General Electric and her parents and the child and I are having a battle. The child and I say forget the artificial arms. GE, TIRR, and her parents say put them on. So I made a deal with her. I said, "Can we go to TIRR, put the arms on and when we get back home take them off?"

This is how she copes with it. She just does not like them right now because sh[redacted] and she does not like the straps, they get in h[redacted] she should be trained and informed that they [redacted] an make that decision later on.

In my case, I gre[redacted]out them. I did not use them and I learned to do a lot of things without them. I do not feel like I need them. Now my question would be, for what? Whereas, you have gotten accustomed to them and you like them and you have experimented with them and they are fine. But I think it is really a psychological acceptance.

Gallaway: That really shows two different perspectives, doesn't it?

Audience: Shirley was born without her arms and has used nothing else so that is normal and now you have been without your arms long enough that it is normal for you this way. He had to make the adjustment but Shirley, did you have to make that adjustment?

Shirley: The adjustment was different. One thing that was a big problem, was that I was denied education on the basis of my disability. He finished his high school education, but I was denied entrance. I finally did go and was educated in the public school, but those are things that I had to go through.

I was discriminated against whereas Randy had already finished that area and then he had no problems with college. I had no problems with college, either. It was totally different, it was beautiful. My biggest problem in college was the fact that I was four years behind everybody. I think again, the difference is

that he had already finished that part and it was a thing of deciding within himself that he was going to be the best student because he wanted to be. I had to be the best student or else I was going to be kicked out of school. Mine was being influenced by an outside force but his was really an inside thing. Now that I am older everything that I do is an inside force. I could care less what anybody else thinks.

Gallaway: Let me mention something that came to mind. As you counsel with people who may need some appliance, have the opportunity to experiment with an appliance, you need to warn them that, as in the case of artificial arms, it may be very uncomfortable at first. For a month or six months or a year there may be some discomfort and problems. There may always be some discomfort but they will never know unless they stick through that first uncomfortable time. The first few months I wore my artificial arms I was in pain. I could only wear them an hour or two hours. After about six months it was comfortable to go all day and now I can wear them sixteen or eighteen hours with no problems at all. They are comfortable, acceptable and useful. Part of the reason for an artificial arm is involved in self-acceptance and the way you meet and deal with people. For me, because I did begin life with two hands, it is much easier for me psychologically to have something in my sleeves. To appear to be as normal as possible is important to me. When I meet people they react differently when I wear two hooks and when I wear one hand and a hook. Their reaction is different. There is a shock involved when you meet someone with two hooks. There is an empathy, a reaction emotionally and I try to cushion that for them. I try to help people meet me. For a handicapped person, part of life is going to be learning to help others accept you. That may be something in your counseling that you could work with. What is a way that you can set people at ease? It may be a joke; it may be a gesture, just being aggressive, whatever. Each person needs to develop a way to help people relax. I usually make some little joke when I am about to shake hands with someone. I will say, "Scream if I squeeze too hard," or "This squeaks but it works pretty well." Something to let them know that I know it is artificial and I want them to be at ease.

Audience: One of the many things that people have a problem with is thinking persons with a disability feel sorry for themselves. I would like for you to address whether you think that is healthy or unhealthy.

Gallaway: I think in the area of self-pity and feelings about yourself you first of all need to be realistic. It is ridiculous to counsel someone, "Well, it is not so bad. You'll get over it." Maybe they won't. You need to be realistic. Admit it hurts now, that they have some difficulties. Then tell them they have several options in life and help them think about them.

They can say, "Woe is me. I have lost everything. I am no good. I can't do anything." Look at where that will take them. Is that what they want in life? To be a kind of human wreckage on the side of the road? Or do they want to take the abilities and skills and interests that they do have, the things that they can do and use them, however limited they may be, to carve an identity and make a mark on the world and have an impact on their society? They can find something that gives self-satisfaction and enjoyment and a feeling of worth and value. Let them grapple with that. It may take some time, a year, five years, I do not know. But tell them, "It is your option. You can be wreckage on the side of the road or you can do some incredible things that will be meaningful to you and valuable to you. It is up to you to make the choice."

I think it is good to encourage them to try but it is not good to say, "It is going to be easy." Probably it won't be.

Once they come to that life decision, "I am going to do something worthwhile," then they have worth even if they have an arm missing or are disfigured in some way. Helping a person come to self-worth in my work is related to their understanding of their relationship to God. A lot of students who are perfectly healthy have problems with self-worth. We have attempted suicides all the time with perfectly healthy students because they have not found reason to value their life. So my job is easier than yours in a way because I am free to deal with a whole person -- spiritual, psychological, and physical. Keep in mind that those areas are all involved and some spiritual help may be what a person needs as much as vocational guidance, a support group, love and affirmation.

Audience: Which hand do you write with?

Gallaway: I use my left arm. They were able to save this elbow and rebuild a tendon so I have more control in this arm. In fact, I do 90% of what I do with this arm. Four years ago I heard about the Boston Arm. I had been watching its development and went to Boston and saw it and hoped to purchase one when I got out of the seminary and went to work full-time. But some friends at my church heard about it and surprised me with a gift of $4,000 to get the Boston Arm and get it fitted as a right arm. I am now wearing it.

I usually leave the Boston arm shut off when I am speaking because it does make a little bit of noise. And when I get excited sometimes it jumps and I don't want to hit anybody or knock myself out! It works electrically when I twitch a muscle in my shoulder. It will lift about ten pounds and is supposed to hold fifty but does not do quite that well. It will hold fifteen or twenty. It is functional and helps me a lot.

Still, there are some advantages to the mechanical arm. When I am doing heavy things and mowing the yard, or lifting stuff and working on things (a friend helped me do a valve job on my car a few weeks ago) I use the mechanical elbow. But for office work, this electronic arm works very well. I have been wearing it almost two years now and have had only a few minor problems.

Audience: Did you have any problems with the physical facilities when you were in college?

Gallaway: Doors, door knobs, this kind of thing. Someone comes along that has been rubbing Brillcream in his hair and turns the door knob. It gets oily and I come along and can't get any traction. That was a major thing. I love European door knobs. They have a handle that comes out and curves and you can work it with your knee or your head or your leg or your hand. Learning to drive again was just a matter of an attachment on the steering wheel and a horn in the floor. I have not had any problems driving, but if they had not been able to save this elbow I would have had big problems driving. I would have had to work out a foot steering arrangement probably.

Audience: How about addressing how inconvenient your inconvenience was with your love life?

Gallaway: At first it was really difficult to see how anyone could love me. I had a few dates in college with the girls in the group and a few outside that could love me and respond to me and so I did a lot of praying. In fact, my freshman year, it was kind of a joke. I prayed, "Lord, it is getting late. Hurry up." Sophomore year, the same question and the same prayer. Junior year, senior year, first year out, still praying the same thing. Then one day I met a girl at Texas Tech when I was visiting on their campus. Her life and background had prepared her to believe that human value is really on the inside. She had learned from her family, her background, and her own beliefs to look beyond the physical appearance to the heart. We began to date and write letters. She lived in Lubbock and I lived in Fort Worth. I would go and see her and she would come see me and after about a year and a half we were married. That has been

one of the most beautiful occurrences in my life. That was five years ago.

There have been difficulties in adjusting, of course. Two absolutely normal people have difficulties — with the 50% divorce rate, that is obvious. But we have pledged to each other to spend our lives together and we are going to overcome the difficulties and find ways to be compatible, whether we are or not. It has been an exciting pilgrimage. We enjoy being together.

One question that has not come up that I expected is how much do you offer to do for a disabled person? My wife and I have an agreement that I will do as much as I can for myself and then if I need help, I ask. There are some things that she is not good at doing. She feels free to ask me and then we fill in the missing parts. As you counsel people, help them to know that they do not have to sit there and fight something. If someone is wanting to help, do not embarrass that person by refusing. Be gracious and accept some help occasionally. I can be totally independent but I sometimes end up sweaty and frustrated. It helps a person build a friendship to let them help you a little bit.

Of course I do not like people that rush up and want to do everything for me. I will say, "I am used to doing this and I can do just fine. Let me show you how I do it." Then I demonstrate for them that I can. That helps them know where they fit in and what they can do. If I need a little bit of help I will say, "Hey, would you grab that for me? I don't look very good in orange juice." Those are some things that you as a counselor could help them learn, and be gracious about that.

Some rehabilitation programs demand that you be totally independent immediately. "You've got your arm and have had it for 24 hours, why are you asking me to help?" I do not like that kind of program. I think gradual learning is better, taking your new device or technique or whatever it may be and then experimenting with it, rather than being cast out on your own. Learn one major thing at a time. Do not try to tackle the whole world at once.

I would have liked a little bit more pressure. I did not have enough pressure. It took me longer than I needed to learn how to dress completely. I had to work out a system to get my shirt on. I drive a nail into the wall, put the collar of my shirt in a clip board, and then hang the shirt and the clip board on the wall. A paper cup goes over this hand and I can scoot into the shirt. It took time to work that all out and now I have enough flexibility and dexterity that I do not need the clip board or the cup anymore. But at first I needed some time and I was given that and I appreciate that.

Audience: What has been the most embarrassing question for you to answer?

Gallaway: Little kids always ask me how I take a bath. I had to work out a system on that too. I got a bucket and a bar of soap and ran some hot water in it and let the soap melt a little bit and get the water soapy and then use a beach towel. I get it over my arm, dip it in the soapy water and sling it around, and rub up against the wall. That too took a little bit of time to learn.

Audience: How do children react to you just walking down the street?

Gallaway: As they do with anything different. There is an initial fear because you are different. But after they really look it is pretty much up to me how they will react. You are in charge then and if you speak to them and say, "Hi, what is your name?" and you get to know them, then you relieve their fears and they get curious.

Part of my college experience was going into a poverty community every Friday night with a group of students. We would gather up every little kid that we could find and the little kids would come up and look through the screen door and see these artificial arms and they would run screaming, "Mommy, Mommy, a monster is here." I would coax the little child to come back and bring the mom and I explained what we were doing and that I was not going to hurt them. I would show them how my arm worked and they would be safe and they would be afraid a little bit and then they would come forward and in a few minutes they would be holding on to my hand. Everybody wanted to hold my hand and then we would all go down to the building together for recreation and Bible stories.

Kids adjust so much faster than adults. Once you tell them what is going on, then they know you are not going to hurt them. You show them how it works, then you are their best buddy because you showed them some personal interest.

Audience: I think if it is a real small child the initial thing is fear. If it is a child about 5-8 years old, the initial thing is, "Hey, what is wrong with you?" If it is junior high school students they are going to come up and talk to you. If it is high school students, they will speak and keep going. If it is college students they will look and keep going, and if it is an adult they will glance.

Gallaway: That is exactly right. We develop a level of sophistication. A child is the most honest and the adults are the most deceitful. It is interesting to go to a restaurant and see how different parents react to their children reacting to me. My wife did a paper on that one time because some parents are so uptight and embarrassed that they don't want their child to look at all. I even had one family who hit their children and said, "Stop looking!" The children would start crying and they caused a scene. I leaned over and said, "Let the children come on over. It won't embarrass me and I'll show them how my arm works." "No, no. That is okay. Shut up kids!" I think that we, as people with inconveniences, can help society learn to relax and not be so embarrassed. I am a person and I have had all the feelings and experiences and all the hopes and fears and guilts and joys that anybody else has whether I am physically whole or not. I am people just like you.

Audience: Sometimes an invisible handicap is worse than a physical handicap because there is less funding, less attention, and less forceful work because they think they can handle it.

Audience: People do not realize that even with a physical handicap, you can still learn. You are just as intelligent or smart as anyone else. A lot of people think that if you have a physical handicap, then mentally you are just nothing. I do not know when society will come to figuring out the difference. Until they do there are going to be quite a few problems.

Audience: I know that people do call me dummy because I am deaf. But it does not bother me anymore. I just turn around and say, "Hi, Hearer!"

Audience: I work with all kinds of disabilities. A study came up in a workshop for the hearing disabled and the results indicated that persons with glasses can remember more of a speech than ones without glasses because people tend to listen when their eyes are directed. If we wear glasses our eyes only go within the scope of that glass, therefore when listening to someone, our eyes are not going to go any farther. Without the glasses there is a tendency to see everything around us, over us, and under us that can attract our attention and therefore we hear just a little bit less. I did not believe that until I started wearing glasses and I found out that was very true.

Gallaway: Let me pick up on one thing. We have three people here from a recreation therapy class. Something that has been very meaningful to me for the last three or four years has been finding something recreational that I could do. I have gotten into snow skiing. I love to snow ski. I have gotten into jogging and even entered a half marathon last summer, a thirteen-mile race in San Diego. I took a while at first, when I

got out of the hospital, I could only walk a few feet and could only stand up with help. So the progress to some physical fitness has been good for my self-image and my self-esteem. Counsel people to find something that is fun, whether it is rolling a bowling ball with their foot or jogging or swimming; something to relieve their tension, to pour some energy into and give them a recreational sense of satisfaction. That has done a lot for me.

Audience: The people that I know my age in college tend to take their bodies for granted just by the things they do and the things they put into them. Alcohol, tobacco, junk food, whatever. If they could just have the opportunity to meet with someone like you! It has been enlightening, so rewarding to just sit here and listen to all of you talk and express your views. It is nice to know how everybody else feels. You know how we feel towards you and now I have an idea of how you feel towards us in your situation.

Gallway: That is a good word to end on. I appreciate your attention.

BLINDNESS IN THE REAL WORLD

PAT POUND

How do you react when you [illegible]nd people? Pat Pound, herself blind in a very real and active world, gives [illegible]lating to blind people, insights into their view of the world, and advice on [illegible] can help open up vocational choices to them. She also addresses some c[illegible] on their safety that people often have, as well as listing some sources fo[illegible]ical assistance in providing vocational training to blind students. Mrs. Pound works with the Developmental Disabilities council, a governor-appointed council in Austin.

To begin, I am going to go back and tell you about myself. Often if I forget to tell people how I am blind, what made me blind, etc., people spend the whole session wondering and do not hear anything I say! I was born very prematurely and was put in an incubator with too much oxygen. They did not know at that time, but too much air causes blindness. I was partially sighted until I was thirteen, and until that time I went to public school. When I was thirteen I became totally blind and at that time I was transferred to the School for the Blind. I did not like it very much. I went to summer school at home in the public school and thought it was great. I wanted to continue there, but both the school and my parents were not quite ready to have me. My college background is in math. My working background has basically been in the rehabilitation of blind individuals.

We should talk a little bit about partial vision since the non-predictability of the thing makes it difficult for people to understand. If you are around partially sighted people you do not know how much they can see, you do not know if their vision is getting worse as they get older, you do not kow if their vision fluctuates from day to day. Also, vision and partial vision often depend on the light in the room, the color contrast, and various other circumstances. A number of partially sighted people have told me that they would almost rather be totally blind because people tend to put them into the class with people who can either see well or who cannot see at all and they really do not fit into either group.

I have three goggles here that I will pass around; the boxes tell you the eye conditions they simulate. Put them on and try them out. In longer sessions I make people walk around and do different stuff. My favorite activity is to make somebody try to eat a fig newton with a knife and fork. You are safe today, though, since I forgot the fig newtons! With these goggles you can have an idea of what it might be like to have those particular eye conditions. There is also a very good film called "Not Without Sight," which shows even better than these goggles what it is like to have a certain eye condition. With the movie you can see what someone would see if they were partially sighted and had that particular eye condition.

I guess the rule of thumb I would use with partially sighted people is to avoid thinking you know how much they can see. Something is going to change on you and then your assumption will be wrong. It may be a cloudy day vs. a sunny day, a morning vs. an afternoon. With some eye conditions the brightness of the sun really bothers people. With other eye conditions they need very strong light to see what they want to see.

As a girl, this changeability was especially evident playing basketball in a particular gym we had in grade school. There were windows at one end of the gym. When I was facing the windows, I could see pretty well. But, if you remember, the old-fashioned gym floors were waxed and the glare from the windows was tremendous on that waxy gym floor — so bad, in fact, that with my back to the windows and facing all that glare, I might as well have been sitting on the bench!

So most people are not going to be able to judge just how much a partially sighted person can see. With some eye conditions, particularly eye conditions relating to diabetes, where the blood vessels in the eyes expand and allow more blood than necessary to flow into the eye, the condition can vary from day to day, even from time of day to time of day. So even if you really think you are smart, do not think that you know how well somebody with partial vision can see. Asking them is the only way I know to find out.

In another session that I did, a lady asked, "Do you really have better senses than other people? Are your senses better because you cannot see?"

I do not think so, personally. Just because I cannot see you, there are as many things that I hear that are discriminatory as you see. When you see somebody that looks ratty, I may see somebody that has a gravelly voice that I cannot stand or who moves strangely. So I do not really hold with the concept that because you cannot see that allows you to know a person's personality or character better.

Also, blind people get the thing thrown at them a lot about whether they hear better than other people. I may listen to some sounds better than other people. We all hear those sounds, we just make different use of them. You can do what blind people do with those sounds if you choose to. It is a matter of exposure and training.

One other thing that I want to talk about that I think is extremely important, particularly for teachers, is the whole concept of how people learn things, relating particularly to color-blindness. The less vision you have, the more you learn this way. I perceive the world from little to big. You perceive the world, visually, from big to little. For example, when I go to someone's house for the first time, the things I am going to know about that house are probably the pathway from my car or bus to the front door. I may know what the front door handle looks like. I may have an idea of the size of the room I am in, or the chair I am sitting in. Those are the things that I learn as I go into that house.

But suppose you go into that house. Probably you will remember something about the overall style of the house, the weeds in the front yard, the style of the room, the size, the general make-up. Now if we both went to this room for one time only, when we came back we would have very different information. If you asked me, "What color is the room?" or "What style is the house?" there is a good chance that I would not know. But if I asked you, "What kind of material was the chair you sat on?" you probably would not know. The more exposure we both have to that room, the more of the same information we know. I start over here and you start over there and then, in time, we both get together.

That is very important because, as you are showing a blind person something, you cannot assume that in their heads they have a picture of what this finished product called an engine is going to be like, if they have not really seen the engine first. Nor can you expect them to have a whole concept of what the layout of a building is like. They may know piece by piece as they actually put it together, but you cannot start with the big concept and then pick up the little ones. The job of the teacher is to assist people in obtaining the concept of the big.

Another thing that I like to point out is that when you show blind people something, a lot of people grab the wrist and say, "Here is the paper, here is a spoon, and here is a fishbowl." Then all I really know is that my hand was further to the right when I was shown the paper, less when I was shown the spoon, and more to the left when I was shown the fishbowl. You turn me around once and that is really all the information that I have. Better to say, "There is a table here. There are three things on it. Start at the corner of the table, here (put my hand on it — that is a reference point since the corner of the table does not change like all the objects can). From that corner, here is the paper, the spoon, and the fishbowl." It is okay to put people's hands up, but then turn them loose so they can feel.

I had a very hard time at — I hate to tell you — a facility that manufactures things for blind people. The woman took my wrist and said, "Here, and here, and here . . ." and I could not get the lady to turn my hand loose. It was just terrible! I did everything I could and finally just said, "I do not like you holding my hand." I could not look at anything that way. It was like somebody had hands over your eyes. So if you place a person's hand on something, turn it loose so they can look around on their own and feel whatever is there.

Give them a reference point, too. I never go to something, I always go *from* where I am. If you were shipwrecked on an island [illegible] to somewhere you would need to know where you [illegible] same thing for me. I need to know where I am before [illegible] how I am going to get somewhere else. Giving directions to blind people can be very hard. You cannot say, "Over there, past the yellow building" (although people do say that, unfortunately).

I have to tell you this experience I had. Bus drivers in Austin are not too swift about letting you off in the right place. So one day a driver had taken me about six blocks past where I had wanted to get off.

"Hey," I said, "I am getting real angry about this. You have done this three times in a row."

He said, "Well, you should have reminded me." Now how could I do that?

I guess what I will do now is go ahead and start through some of the materials I have given you. You have the braille alphabet card. This is a braille clipboard. Frankly, there are two reasons why I brought it. It is smaller than the rest of my clipboards and it is also in better shape. People have asked me if braille wears out. Well, yes it does. If you sit on it or store it laying down rather than standing up it will wear out. Cookbooks especially wear out because they get wet hands and food and lots of cooking things put on them.

People have also asked me if braille is put on both sides of the page. These days they are able to offset the braille so that no dot on one side is right where a dot would be on the other side. But you cannot do that when you are writing braille yourself. It is nice that they can use both sides, actually. One *Better Homes and Gardens* takes up three volumes. You can see that a subscription to a magazine can be a considerable investment of space. A lot of magazines are on sound sheets or cassettes now.

This thing is called a stylus. You can take this, put it into a little gadget and punch. You have to write from the right to the left, and make the character shapes backwards from what you would read. That can be a particularly difficult thing for people with any kind of learning disability to do. There are other writing devices, but none as portable. This is what you can stick in your pocket or your purse and take with you.

I have not really gotten into vocational education. One thing we have found in terms of success is that it partly depends on what kind of aids and what kind of individuals might be around you that could provide you accommodations for doing a particular job. For example, there may be a situation where you could fly a plane once you got into the air and had someone giving you the feedback from the instruments. I am not sure *I* would want to do it, but I am sure someone would!

However, that would not work as a profession. I think there are a lot of things that blind people can do, that they would not necessarily do as a profession. A number of blind people snow ski and water ski, and yet I am not sure any of them would want to be a skiing instructor because it takes too much assistance from other people. Snow skiing takes information from a guide — like "Watch out for that tree!"

One other thing I will pass around was developed at the Criss Cole Rehabilitation Center for the Blind. You can get it either by writing them and paying the cost of copying or writing the field offices of the Commission for the Blind, which will have it as well. It is a listing of different equipment. Not everything is in here, particularly not everything that is vocationally oriented, unfortunately. It was developed for people at the Rehabilitation Center, so it mostly includes equipment about daily life skills.

There are a lot of good magnifiers available. For example, they can be like a closed-circuit television that blows up the print number larger than what you would see in a book. There is a thing called an opticon that allows a person to feel what is actually printed. It has a lot of limitations in terms of speed of reading and things like that, but it does allow a unique kind of independence. There is going to be an attachment later this year that will actually read what it sees in print to you, so it will have a verbal output as well. There are talking calculators that are very good. Unfortunately, most of this equipment is extremely expensive and so buying it is not something that everybody in every school district can do. However, it is very important for some people in some vocations. In my way of thinking, $1300 to allow someone to do all of their own reading in a vocational school may be a really wise investment considering that you might otherwise pay readers much more than the $1300.

I brought a couple of fun things just because I like to talk about recreational stuff as well as vocational stuff. If a person has an idea of something that they want, then adaptation can come out of somebody's garage. This did; it is a beeping frisbee. It is hard to catch, but a lot of fun! I use a short-handled fish net to catch the frisbee. You can also get a beep baseball. I modified a Backgammon game myself. It was a regular, out-of-the-store, magnetic backgammon board except that the magnetic pieces were such light magnets that I could not tell they were magnetic by feeling them. As I felt for the pieces, I kept moving them all around the board. I found some stronger magnets and put them on all the pieces. This was how I got a nice-looking, easy-to-use, portable backgammon set.

I bring that up because modifying is something that anybody can do, if you decide to be creative and decide to tackle the problem yourselves. Some of the best recreational opportunities have been developed because someone was not willing to listen when something was declared out of a blind person's capabilities. I think one of the most handicapping things about blindness is the attitudes of blind people and sighted people about what the limitations of blindness really are. How many people would really think about blind people playing baseball? But somebody did and developed a way — not necessarily the Little League way, but pretty close.

One other thing: people have asked me about using the word "see." Well, do not feel uptight about using that word. What will you say instead of "See you later"? "*Feel* you later?" "Speak to later?" Just what kind of a commitment are you making? You may want to think about that!

Audience: What is the right way to lead a blind person?

Pound: First of all, you do not need to grab their arm. Instead, put their arm on your arm so that they are behind you. If my guide goes down two steps, then I want to go down two steps because I can feel you going down. If you are going through a narrow passage, I need to be more behind you, so put your elbow back. Then I cannot be up close to you. And do not worry. If I could count the number of things that I have bumped into, I would have nothing else to do with my life!

Now about chairs: if you are walking up to a chair, walk up from the back, take the blind person's hand, put it on the back of the chair, and say, "Here is the chair." You cannot just say, "There is a chair," and expect me to know where. It is so simple to put my hand on the back of the chair. Another option is to let me touch the front of the chair with the back of my thighs. Then I can know to sit down.

Just do not be afraid. Most blind people will tell you if you are doing something that is really uncomfortable for them. Most people get more uptight about leading the blind after they have learned a few things than before, so I am hesitant to go into too much detail.

Audience: What were some of the problems that you had in college with support services?

Pound: I would have liked to have had more equipment available and to learn to use the equipment. You often need training before you can use equipment. I thought I was going into programming. Had I had the equipment they have available, I probably would have. I did take a few programming courses, but they were extremely hard because I had to have so much reader time to do the computer print-out. My reader had to sit there while the computer was down for three hours and I ended up spending all my reader money paying someone to wait for the computer.

I had hardly any mobility services when I was in college and that was a real hassle. Most of it was catch as catch can. In my courses most of the materials were available. If you are in a technical area it is much harder to get materials. For example, I probably would have really liked sciences but I had such a bad high school and grade school background that I really could not handle the work on a college level. Since that time, I have really enjoyed reading in that area, but I was not given an opportunity at that time to develop an interest.

Audience: Where did you start school?

Pound: I started at the University of Texas. I was there from 1968 to 1970, and I was at the University of Houston from 1970 to 1971.

Audience: Do you see a difference in the programs for assistance to handicapped students that are available now?

Pound: Yes, there are a lot more programs now. Section 504 has opened up services, but not really enough. I think there needs to be more assistance and communication with teachers who are having handicapped students in their classes. I think people ought to know what accommodations they can make. Marc Gold's statements on that were very apt; it is really not as scary and difficult as people tend to think it is. But it is scary and difficult when people are not given the information and assistance that they need. I think we have a long way to go on that.

Audience: What are the considerations when deciding for or against a seeing eye dog?

Pound: I think personality has something to do with it. There are advantages and disadvantages, like what kind of car you drive. I go to a lot of places where a dog would be inconvenient. However, a dog can be a very, very convenient way to travel, for recreational travel particularly. In some ways, a dog can help you avoid things when a cane would be useless — like in a parking lot. One of my hang ups about dogs is that people speak to the dog before they speak to the person. That drives me nuts. I could not take that! Also I find that I am not that consistent about caring for my own needs; I am not sure that I want the responsibility of an animal all the time. A cane I can leave at home, a dog I would have to plan on spending more time with. So a dog would tie me to a time-ordered system.

Audience: How does a dog know where you want to go?

Pound: Oh, you have to let it know whether to go left, right, or straight ahead, so you still have to know where you want to go. You cannot just say, "Take me to the grocery store!"

Audience: Do you have any perception of color that you can remember?

Pound: Yes, I can remember colors. In fact, it probably works to my detriment. I am really particular about things going together. If you think about it, colors change over the years. People would tell me that something was a certain color, but it was hard to know whether their definition matched mine. My

mother helped a lot on this. I found that colors of food are fairly constant, so my mother would say, "This is green like lime sherbet," or "green like real green grass," or "purple like grape juice." I have one dress that no one has been able to describe well to me. Part of that is because colors really do change. Moss is an example of a color that differs a lot.

I visualize everything that I do. That is natural with me. What we are doing right now I will remember as I visualize it. It does not matter, really, whether my visualizations are correct or not. It matters that I have something visualized so that I can remember it. I have even gotten into some arguments with people about what something looks like thinking that I could actually see it. After a while, they will say, "By the way, why are you arguing with me?" It really does not make a lot of sense!

Audience: How much more difficult is it for someone who was born blind than for someone who loses their vision?

Pound: I am not sure you can say it is more difficult. It depends on the person. You could look at it this way, I guess. There are a lot of concepts that are much easier to learn visually, such as spatial concepts. What is a curb like? What is an intersection like? How do cars go? These concepts are more easily learned visually and, once you have these concepts, it is easier to learn to walk around with a cane. The other side, of course, is the difficulty in adjusting to blindness. Sometimes that adjustment is so difficult for a particular person that it was not easier for them to have once had their sight. So it depends on those two sets of things. I have known many blind people who have not had difficulty learning those visual concepts. At the rehabilitation center where I taught, we were seeing many, many more blind people with additional handicaps, such as learning disabilities or spatial disabilities. That made the difference, rather than just the blindness.

One other point that I would like to make is that modifications are great in teaching people the way to do things, but it is like teaching people to drive. You can teach people what the best and safest way to do things is. In their own life, however, people choose whether to keep doing things that way. Sometimes people will teach mobility and get hung up on doing it a certain way. There was one person at the rehabilitation center who really did not like me much because I kept demonstrating that blind people do not always do things one way. They always tell you to check that nothing is in the chair before sitting down. Well, how many times in my life is there going to be something in that chair? What is more, how many times will it hurt me? I think probably very few times — although I *have* sat on a few ash trays! To me it is more convenient not to clear the chair. I am willing to take whatever risk there is. I am glad to know what a safer way is; I am also glad that I get to choose whether to do it that way!

I have enjoyed this session very much. Feel free to stay and talk.

RELATING TO THE PHYSICALLY HANDICAPPED

DONNA WILLIAMS

How to interact with handicapped students could be a difficult topic to talk on, but Donna Williams speaks from her own experience as a handicapped person. With a background in first Speech and then Guidance and Counseling, Donna is presently director of the Dallas-based service, Handicapped Assistance, which provides job placement and counseling of the physically handicapped. The success of this business endeavor is a reflection of the insight, experience, and talent Ms. Williams has in developing individual counseling plans for handicapped students.

I am very happy to be here this morning. I am going to have to rush through my speech because of our time limit; I hope we have enough time. I am cerebral palsied myself. I was born with cerebral palsy; I am spastic quadraplegically, with a mixture of athetosis.

My topic is relating to the physically handicapped. I will also tell you about the agency I started in June of last year. First of all, the agency is called Handicapped Assistance. We are a private employment agency for the physically handicapped. I limit it to physically handicapped people because I myself do not feel qualified to work with any other handicapping conditions. Besides the employment agency, we have a vocational and a personal counseling service. This is one of my loves because, growing up as a handicapped child, I did not have anyone I could relate to or talk over my problems with. Our counseling theory is to let the child or the adult or adolescent express to me, or to whom they are talking with, exactly what they want; no matter what kind of physical handicap the person has, he does have some desires and wants. We need to be able to slow down enough to listen to him. A lot of my clients have said to me, "No o[illegible] the time to ask me what I thought about thi[illegible] from therapy session to therapy session, or [illegible]s, and I went through my own routine; but no[illegible] Johnny, I want to know your ideas."

Public Law 94-142 has given the handicapped person a lot of rights. I am not going to stand up here and say that we need more rights than anyone else, because in my agency, I am finding that the people I see think these educational laws and work laws should give a free ride to Easy Street. I just flat tell

them that is not the case. Everyone has to work for what they receive,but they have to decide what they want to receive. I will give them suggestions as to their options, according to their abilities, but I will not make that final decision for them at all. It may take us six months to make one decision, but that is all right, they have made the first step for themselves.

Society has sometimes done the physically handicapped persons an injustice by lumping them all together and saying these people are slow learners. There are some slow learners, but there are some brilliant youngsters and brilliant adults that just have trouble getting the knowledge out. You can sympathize and see what they have retained. I had trouble devising methods to find out what these people need, but as teacher and counselor, I feel that it is my duty to do this for them.

I have spoken a little bit about Handicapped Assistance. Besides the employment agency and the counseling service, we also have a health referral service, which is almost self-explanatory. We have a public speaking bureau, through which I give lectures concerning the handicapped.

I would like to tell you about one of my counselees as an example of many of my clients. She is thirteen years old, has cerebral palsy, and has her mother and daddy fooled into thinking Laura cannot do a thing. Laura thinks that she can wrap her folks around her little finger, although she will not admit to any of this. It took me six months to find out that this was the case. Finally I convinced her parents to do at least one thing for Laura — send her away to a summer camp for two weeks. This will help her to become more independent and relate to other people.

This young lady also has her mother convinced that she cannot go into a swimming program for handicapped children. The school is willing to put her in this program, but her mother's excuse for not letting her go into the program is, "She will get her hair wet."

I say, "Well, doesn't she get her hair wet every time she washes it?"

With these excuses, I have to be very tactful, and yet be very firm with the parents, and work around them. I believe in my philosophy of counseling, to expose the child to every area of life to which you would expose any other child. I use the word "child" very loosely. I am talking about anyone; I consider myself still a child or a big kid, so that tells you how I am using the term.

A few moments ago, I mentioned having the individuals express themselves. This at first may be through temper tantrums, and we have all seen this, but later on, it may be through unintelligible speech. It is very hard for me to sit and listen to this; I get just as impatient as you do. I sit there and I will want to say, "Is this what you wanted to say?" But I should not. They need to learn to express it for themselves, though. We need to help them think through some of their problems. A lot of them do not have a clear thinking process and we need to write down a counseling plan for them. If you were a teacher in an ARD meeting you could do this. I am talking from a counselor's point of view because that is the only field I really know.

After this counseling plan is worked out for the individual, we need to talk with him about it and have him understand what we are expecting from him. We need to expect a little bit more than he can achieve. If we underestimate the individual, he is going to have the bluff on us from the first. So we need to avoid over-building his expectations but make his goal just where he has to stretch, maybe an eighth of an inch more just to achieve it.

In one of our counseling sessions, a thirteen-year-old girl came in and we sat there for an hour without saying a word. I nearly went to sleep. I tried to ask her a question and, since she was very shy, she would not respond. Now she comes in, and I can hear her halfway down the hall. I think counseling for any handicapped person, whether physical, mental, or learning disabled, is vitally important. Not so much academic counseling, even though they need that also, but the need for someone to say, "Hey, you are a person. It is okay you are like you are, but I want to help you to do more, to enjoy life more."

Now I would like to tell you about the work I did in Houston. I worked with United Cerebral Palsy of the Gulf Coast for 8 months, developing programs for severely to moderately handicapped. When I went into the program, there was nothing, no supplies, nothing at all. I worked there for 8 months, teaching handicapped adults; some did not even know their colors or how to count from 1 to 10. My most advanced student was beginning to work on her GED. I had one young lady who started out with a first grade reader and within two weeks was in the second grade. No one had ever given her the opportunity to read anything.

Most of these people were living in a nursing home with obviously older people; it was not a good situation. Many of them had never been on outings. They would go from the nursing home to my program and back to the nursing home. When I discovered this, I said, "Well, we are getting out. We are going to shopping malls. We are going on picnics. You all need to see the outside world."

I also made them plan their own seasonal parties with guidance from my aides. They had to tell us what kind of party they wanted, and what they wanted to buy for refreshments. I made one of my more advanced students figure out the portions for me to go buy so we would have enough but not too much. We had a picnic in Houston. Most of these people had never been on a picnic. I had to explain what a picnic was to them.

This program met in a church where we had access to the gymnasium. Every day they would do some type of physical activity. I am not proclaiming to be a PE teacher or a physical therapist or anything like that; I just thought they needed some mobility at least to get blood circulating in the limbs they were not using.

Now I would like to open it up for questions, if you have any.

Audience: Have you done any referrals or are you familiar with the Crippled Children's Camp in Kerrville?

Williams: Yes, in fact I went there as a child. We have the Soroptomist's Camp in Louisville, which is 30 miles from Dallas. For the young lady that I spoke of earlier, that is as far as I could get her away this year. I keep reassuring her mother that if something goes wrong, she can be there in 45 minutes to get her. Her mother has asked me if I would go to camp with her and sleep in the same bed. I said, "No, and neither will you!"

Audience: You are using these facilities for the younger people?

Williams: I send them where I think they will benefit the most. I subscribe to Reality Therapy. I tell it like it is and if they do not like it, they just come back in two or three weeks instead of the following week.

Audience: How about referrals with other agencies that are involved with personnel evaluation procedures, rather than only involved with handicapped people? Some agencies are involved with non-handicapped people plus handicapped people in evaluation for employment. Do you cooperate with organizations such as these?

Williams: Sure we do. But it is very hard to have other agencies say, "Hey, you are a profit organization." Well, at this

stage, we only *hope* to be a profit-making organization. A non-profit organization may have the same kinds of services, but it might be a "get them in and get them out" organization.

My theory is, I do not care how long it takes to get these people placed. I need to get them adjusted first. A lot of my people come in and say, "I want a job, Donna."

Perhaps they have held a job for six weeks or six months on a training program in high school, but they do not want that day-to-day routine of getting up and going to work. Unless they are excited about what they are doing, they could care less. They will come back in two weeks and I will say, "Well, how is the job?"

"Oh, I did not like it because it was the same thing over and over again."

I have to get across to them that they must stick with something at least for a little while to get some work experience. Most of my people have not had too much education. They were taken out of school when they were 16 for one reason or another.

Audience: How young do you take students?

Williams: I will take them in arms. While I will not work with them, I will work with the parents because the parents are the most important factor, the factor that is going to make or break the child. I love to get them younger. I can see myself phasing out the employment and just going into counseling because other places can take care of the employment. For a while I will stay with employment, but looking down the road, maybe things will change. Six months from now I might change my mind. I may see the need to stress the employment more than the counseling.

Audience: I have a client that I am working with. She is in college, and is cerebral palsied. She is a pretty bright young lady but has a very difficult time talking and is very reluctant to use any kind of aid. After you are with her quite a bit you can understand her pretty well. A lot of times when someone has to communicate with her, however, they will ask her to bring someone to interpret for her and she does not like this. My question is, have you had any dealing with any of the mechanical voice boxes for CP's and what has been your response?

Williams: I have not had any experience in that area. I guess I am real hard-nosed and real old-fashioned, but I think "where there is a will, there is a way." They will get it out eventually. My suggestion to you or to that young lady would be one-on-one counseling. Let her become familiar and comfortable talking with you and present the idea that she can take one step further and talk to one of her friends. She could become dependent on mechanical devices and they may not always be available or may not work for her and then she will have more problems.

I certainly have enjoyed this. If you ever have any needs, please feel free to call on me. I do work with people out of town on occasion.

HANDICAPPED EXCHANGE

RANDY GALLAWAY, JAMES SKAINS, BOB ALCORN

In this fast-moving session, three persons, two with orthopedic impairments and one with a hearing impairment, swap experiences and concerns. Each brings his own perspective, his own attitude to having a handicap, emphasizing the fallacy of lumping handicapped persons into one homogeneous group.

Randy Gallaway lost both his arms in an industrial accident at the age of 18; he works as a student coordinator for a group of colleges in California. James Skains was born without legs and without a forearm; he is a high school student in Axtell. Bob Alcorn lost his hearing at the age of four due to meningitis; he works as a language facilitator at Texas State Technical Institute in Waco.

Randy: The unusual part of my life began at age 18 when I was injured in an industrial accident. Up to that time I was just an average kid on the block — threw rocks, rode bikes, picked on the other kids. I was just an average person. Then when I was injured I almost lost my life in a catastrophic electrical accident that happened because someone was careless on the job. While I was working on some electrical equipment, someone carelessly turned the power back on. My partner was killed instantly and I was almost killed. I spent a year and a half in the hospital, had 38 surgeries to get patched up, and was eventually fitted with artificial arms. I had a lot of really incredible experiences in the hospital and had some people that were very encouraging to me, some of the nursing staff, some of the doctors. One doctor, confronted with a choice — a valiant effort, probably — of risking my life with surgery or playing it safe and probably letting me pass away, had a heated argument with four other doctors, even knocking one down. This one doctor had strong faith that they should try. They did, and I survived the surgery. It did not take any faith or courage to believe that I would die, but it took a lot of faith and courage to attempt to save my life. I am really grateful for a man with that kind of strength.

There were a lot of experiences during my re-education: learning to write left-handed, being fitted with an artificial arm, the initial disappointment of finding out that the arms did not work well when I got them. Getting over that, learning how to use them, and eventually getting proficient at writing, dressing, driving and other things that I do all added up to an unusual experience. Some of the most important things were some friends, a pastor and some other people, that were tremendously encouraging. There were some times that I was very, very discouraged and my family members would say to me, "I

know that it hurts terribly right now, but it won't always be this bad. You are alone right now. It seems like there is nothing you can do. But it will not always be this way; you will learn." That was a real help to me.

James: My name is James. I was born like this. They do not know why; it was just a normal happening, not because of drugs or anything like that. I was just born this way. I never did realize I was different because my brothers and sisters treated me just like anybody else. I always played in the yard, rode a skateboard, rode a tricycle; I did everything. I even helped my daddy move houses when I was six or seven. I went swimming and jumped off the diving board. So it really does not bother me being like this because I can do everything I want to do.

All my teachers treat me like anybody else and I appreciate that. The kids at school treat me the same; they are all nice to me. My favorite class is homemaking; I made this shirt right here. I like the shirt. I learned how to drive a car and I drive now. It is really neat driving.

Audience: James, what are some of the benefits of being in a wheelchair or having special services?

James: Well, when I go to Six Flags I go through the exits rather than waiting in lines. Then I can ride as many times as I want. They let me do anything up there. If I want to ride six times, I can. When I go to the doctor's I do not have to pay for anything. I can go to the dentist's and get all my teeth fixed. I could even have them pulled and it would not cost me anything.

Audience: Why is that? Do you have special insurance?

James: Yes, I have Medicare and Social Security. They pay for all of it.

Audience: And you had services from Scottish Rite Hospital?

James: Yes, since I was two months old. The longest I have ever stayed in the hospital was three months when I had my leg amputated and my finger sewed up. My fingers were together at first and they cut them apart. I can wear artificial legs, but I decided to come like this.

Audience: When do you wear artificial legs?

James: Very seldom. I like the wheelchair better because I can get around faster. I do not ever use the wheel chair at home. I just go like I am.

Audience: What was your first reaction of your homemaking teacher when you went into the class? What did she think about you?

James: She was glad I got in her class this year because last year I was taken out of her class and I had to go to another class. So she was glad I got there this year. I wanted to take homemaking because I think there is a lot to learn. If I do not ever get married, I will know everything. I can sew, I can cook, I can do everything I want to do. But at first she did not know whether I would be able to do things. Before she knew it I was up in the top cabinet getting things down.

I washed dishes for her. She could not believe at first that I do those things. She could not believe that I could sew either.

Audience: Other than homemaking, are there any other vocational offerings available to you or do you have an interest in any other vocational offerings?

James: My favorite subject is math. I used to have a go-cart and worked on it all the time, too. I overhauled the engine. I even helped my daddy pick out the engine; clean it and gas it.

Audience: Are there any other vocational programs in your school?.

James: All we have is Agriculture and I do not want to take that. I will take typing.

Audience: Do you see any differences, Randy, in someone who is born with a handicapping condition and someone adventitiously handicapped? What are the differences that you feel?

Randy: I think the adjustment would naturally be more gradual if you were born with a condition and you learned to cope with it as a natural thing and discovered later that you were different. There would be some coping involved there. For me, I was 18 years old, so mine involved a life change. Suddenly I could not drive, I could not go anywhere, I could not dress — all the things I had been used to doing had to stop. I had a year and a half to wait just to get my arms made and I was totally dependent during that time. That was quite a shock to me, being very independent by nature, then being suddenly totally dependent. So I guess they both have their problems in adjustment and coping.

Audience: Randy, had you completed high school prior to your accident?

Randy: No, I was hurt in the spring of my senior year. I just lacked a few weeks and my grades were pretty good so they just awarded me the diploma.

Audience: So your schooling as a handicapped person was in college?

Randy: Right. I was out a year and a half with therapy, surgery, and getting artificial limbs. The next school year, three months after I got my artificial limbs, I entered college to study mechanical engineering. My first class was drafting and the teacher said, "Well, give it a shot and let's see what you can do." I had had drafting before I was hurt so I knew the principles. It was just a matter of learning to hold the pen and put weights on a triangle and get everything just right. It was a considerably more complicated process in each step, but I worked very hard at it and made a B. I found out later the teacher was going down the hall to another drafting room and saying, "You guys, if he can do this with artificial arms, you ought to make A's." So I did not make any friends!

Audience: Did you go to a rehabilitation center after your accident?

Randy: Yes, the insurance company said that I could go to a Rehabilitation Center in either Houston or California. They thought those two were real good. I could go to Houston anytime, but had never been to California, so I chose California! I went to the UCLA Rehabilitation Center and was there a total of seven weeks. It took about three weeks for them to get the arms made, so I did some therapy and watched some films about amputees and things like that. When I got the arms I began training in how to grasp objects and learned to do a few simple dexterity exercises. Most of my learning was after that when I went home and began to practice getting dressed and devising some methods to get a shirt on. I learned a lot of short cuts. I replaced all the buttons on my shirt with Velcro so I do not have to use button hooks.

Audience: How about the frustration level? Eighteen is a hard age to adjust to something like this.

Randy: Two things helped me there. I was a very compliant person and I took things pretty well and I have a pretty good tolerance level. When I did get frustrated, I had a lot of influence from a pastor who worked with me and that helped a lot. I realized that it was hard now, but God was doing some things and it would work out.

Audience: Did you have any feelings before your accident toward handicapped people? I have found that the biggest problem I have had in dealing with special students and dealing with the public is educating the public toward the handicapped.

Randy: Like we all are, I was afraid of some types of

handicapped people. We ask, "Well, what if that happened to me? How would I cope?" We all have those feelings. I had helped a friend who was paralyzed from the waist down — carried his books all the way through junior high and high school — so I had been around someone with a disability and I knew how to get along with that.

After the accident, I had a friend in college who was a keen observer of human nature and he noticed that other people were nervous around me and they were afraid that they would mention a hand or something that might upset me. One time when several of us were on a retreat, this friend got me aside and said, "Randy, everyone is uptight and I am going to help them relax and I'm going to say something that will embarrass you tonight when we are all together. You just laugh and then they will know that they don't have to be afraid and you're just a real person too."

That night we were eating supper (with some real pretty girls, by the way). I was thinking about getting married someday and I had my eye on this one really pretty girl. I was trying not to get any peas in my pocket or mashed potatoes in my hair — really trying to be cool.

Then my friend suddenly says, "Randy, I bet it's really hard to pick your nose with that thing."

I gasped, and everyone there gasped, and then I remembered to laugh and everyone else laughed too. I learned a real lesson from that, that people with inconveniences need to learn to help the public relax around them. Do some things to set them at ease. "Hey, I'm okay, I know who I am, I am a person just like you with a few limitations and so let's talk like people." That is one of the greatest lessons I have learned.

Audience: James, what are some of the ways that your teachers have had to adjust? Do you use regular sewing machines?

James: Yes, I use regular sewing machines. When I was making this shirt, when I made this first seam, I was sitting there sewing and my teacher said, "James, come here for a minute." I looked over there and that needle just slid right across my thumb. I was scared!

I also play a trumpet. I play in the "A" band and I can play a french horn and a baritone. My favorite instrument, though, is the trumpet.

Audience: What are you going to do when you graduate from high school?

James: I have not made up my mind yet. I want to do something that makes me happy. I want to do something that does not get me tired. When I get home I want to be happy. I want to come home and not be tired.

Audience: You let us know when you find a job like that!

James: I have been thinking about being a lawyer, but I said, my brain is not that smart! I did go over to Rehab and spend the afternoon with the psychologist, but I have not gotten the results yet. They gave me 105 questions to take home and answer and then I lost them. I finally found them again and mailed them in.

Audience: Do you wear artificial legs?

James: Yes, I wear artificial arms too and I can go up and down stairs pretty fair but I do not walk a normal speed. I take bigger steps than normal people because that makes me go faster and that is why I like to stay in this wheelchair. All I have to do is give it a wheel and it just zooms on. But I can move fastest without anything. If I am on the ground I just fly.

Audience: What is the best way that you have found if you have a teacher who is a little hesitant about your going into the classroom? Does it work to just communicate with that teacher, to tell how you can work things best? How do you best set the teacher at ease? I know your homemaking teacher was not at ease when you first walked into that class.

James: She told me, "Well, James, I am a little bit scared because I don't know what to do with you but we can find a place for what you can do."

And I said, "Don't worry. I can do anything I want to do."

So she just never did worry — everything they did, I did. I was the first one in my class to finish my shirt.

Audience: James have you had any trouble with architectural barriers, stairs, and so forth?

James: Oh, we have level ground and I am glad we do.

Audience: How have people's reactions been?

James: Some people, when I go to big stores and so forth will look at me. Sometimes I get tired of it when they look too many times. Little kids go by and they just stare at me. They do not bother me the first two or three times, but when they just keep on staring and staring I say, "What are you all looking at?" Sometimes it bothers me. It depends on my mood, of course. If I am in a good mood I just ignore them, but if I am in a bad mood I do not let anybody mess with me!

Audience: How do you react to questions? What would you do if someone came up to you and asked, "Are you contagious?"

James: I would answer them: "No, I am not contagious, I was born like this."

Bob (deaf): If someone asked me that I would pull my ear lobe down and hope I could spread some of it!

James: That was a good one. Well, I do not usually have problems with people asking that. When I started school in first grade, since I was so little, they just treated me like everyone else. But some people ask you all kinds of questions: "What has happened to you?" "Were you in a bad plane crash?" "A bad car wreck?"

I say, "No, I was just born like this."

It does not bother me when they ask me questions but if they make fun of me, it does bother me. I do not like anybody making fun of me because I am just like anybody else.

Audience: How many brothers and sisters do you have?

James: My oldest brother is 26, my second brother is 24, my third brother is 23, and I have a little sister, 16. They all treat me the same. I go everywhere they go. I ride motorcycles with them, and I can ride a mini-bike, go-carts, and bicycles.

Randy: Getting involved in some kind of participation sports has really helped my self-esteem and helped me to become a little more aggressive. I have gotten into jogging a little bit. I entered some six-mile races, and one 13-mile race last summer and that was really fun. It helped me to feel better about myself.

James: I do not go out and join any team, but I do throw baskets and lift weights.

Audience: I have to tell you this experience with Bob. It embarrasses me to tell it, but I will confess it. When I got to class the very first night, Bob was in the hall. He had a class scheduled. I did not know which classroom to go to, so I said, "Pardon me, where is this class?"

He turned around — he had his back to me — and of course did not know what I had said and I thought, this is a foreign student! Then he said, "At the end of the hall."

He said it so I could understand it, but I still thought this was a foreign student who was learning English. Then when I realized he was deaf I did not talk to him; I talked to his interpreter, like he was not even there! I told her the next night I was so embarrassed I did not know what to do. So I apologize to you, Bob!

Bob: Maybe twenty years ago I would have gotten mad, but I am learning how to take things in stride as I go along in life. But I have my choices. If I do not like the people who talk to me I can react like I am supposed to be a dummy. If I like them then I will talk to them.

Audience: I would like to find out from a hearing impaired individual whether the method of communication is actually an issue and how Bob stands on the question of total communication versus auditory-oral.

Bob: It is a very hot issue. I get real hot on the oral issue; I get real hot on the manual issue. I think they should be combined, into total communication, doing everything. If you are not a good lip reader, then what good is oral? If that person cannot learn to sign well, what good is manualism or sign lanuage? Put them together where the child has the benefit of selecting which one is comfortable for him, which one he can benefit from. It is sad that these two sectors are fighting. We should put them together to work with each other instead of saying that is not the best way, mine is the best way. But you know, oral people always take the cream of the crop, the manual people take the cream of the crop, and they fight about which is better. If they picked them at random you would see both parties surprised. I have come to deplore oralism alone. My wife came from an oral school. She depends on me to lip-read for her!

Audience: The problem when we talk about auditory-oral as opposed to total communication is that we have been concerned with a teaching approach as opposed to a learning style approach. If we had taken the issue in terms of what is the best style for this individual then we would have gotten away from what teachers can do to what way children can learn best.

Bob: I think the learning process is mostly a visual thing. I can take a small child who is deaf and attempt to teach him how to talk, how to lipread, and how to learn something by mimicking my mouth. I can do it many times before he finally learns how to do it. Or I can get a ball, he sees it, then I show him "This is a ball," I will bet you the first time he will say ball. He must learn what the ball is before he can say it and get the right pronunciation.

So it is hard for me to argue on the issue of total communication or oralism. Oralism is just one thing, one way. With only oral training they have no choice but to lip read day in and day out. My eyeballs get tired. Deaf people who use total communication can sit back if they are tired of lip reading, they can look at the signs, or if they are really tired, they can ignore the whole thing! With lipreading you have got to concentrate every moment. Once your eyes are diverted, then you are lost. But in sign I can say something to her and dream and still catch a little bit. I can look away and still catch a little bit. Lots of times, workers who work with you say, "Look at me, Bob. I'm talking."

"Oh, I know what you are saying," I say. "I was just looking over this way, but I was still catching what you were saying."

It is the same with my hearing friends. I say, "Look at me, I am talking to you!" I forget that they can still hear me! They do not have to watch me. And yet I demand that they look at me. So it goes both ways.

Audience: What has been your experience with students who have come into TSTI? Have they had any vocational training from high school into post-secondary schools?

Bob: A lot of deaf students do have post-secondary training. It seems sad to me, however, that they do not have life skills which are necessary when they come into post-secondary programs. I know that when I was going to school I was pretty good at life skills. I knew what to expect when I got out in the world. The kids we get now cannot multiply, read or write. They have never heard language in their life so I can see why they have problems reading, but I cannot resign myself to the fact that they cannot multiply or add. Somewhere the schools are failing them. I am not speaking for anyone else, just for me.

Audience: You are saying that you really do not have trouble adapting to vocational areas at TSTI and the curriculum that is involved for those students if they have the basic skills?

Bob: Oh, I do have problems. Do you want to know what is the biggest problem? The problem I have right now is time. We do not have enough workers for one thing. The second thing is we do not have enough money. I really do not have too much of a problem helping the deaf students adjust.

A lot of the deaf people come in from residential schools. If you are going to a regular school you are mainstreamed so you are learning how people react to you. With deaf people who go to a residential school it is good for them socially. They have people who accept them. But when they get out of that school a lot of them face problems. They do not know how to work with hearing peers or hearing teachers, so they have to start learning how to function with hearing people. When I was a kid, and somebody made fun of me, they paid for it with a black eye or a broken tooth. Now I do not care. So age has something to do with it, age made a difference for me. I still become aggravated, however, when people say, very surprised, "You have children?"

Audience: One of the problems that we have in mainstreaming someone into vocational programs is that we forget we have to prove that this person cannot do it and even convince ourselves that he can. It would be nice if we had even higher than normal expectations. It seems to me that low expectations are one of the biggest problems that people who are handicapped have to help us overcome.

Bob: Just remember, when you see handicapped people, look at them as people first, because it is really not a handicap. As Randy said, it is an inconvenience.

Audience: Was it hard for you to learn sign language?

Bob: No, it was easier than learning to talk, but you see I was already talking before I became deaf. I was four and a half years old when I had spinal meningitis which caused my deafness.

Audience: Do you think it is more difficult to be born with a handicap?

Randy: I think it is probably more difficult to be handicapped later because you grow up accepting the handicap you are born with and you learn to adapt before you really know that there is anything wrong. You already have a level of success.

I would like to add one comment to our discussion: Help them find things that will make them happy, where they can see, "I am benefiting the world. It is a good thing I am here because I am helping other people. I am helping the world." Whether it is directly or indirectly, build genuine self-esteem.

Arrange for a creative way for them to experiment if they want, where they will not be blasted if they fail, giving them opportunities to experiment with leadership, with teaching, with growing, with making things.

Audience: I wanted to say something on the issue of whether it is better to be born handicapped or be handicapped later. I am handicapped in that I have arthritis and I am glad that it came later in life. I am glad for the years I had without it.

Bob: I think that might depend on what the condition is. I am deaf. I wish that I had been born deaf because I still wish I could hear music. That is the only reason I wish I could hear.

Audience: But isn't it a blessing to have once heard music?

Bob: I cannot remember what it used to be like. I only know that I once could hear because I can talk. Sometimes I fantasize that if I could hear I would be President of the United States!

Parrish: On that we will close! Thank you all for coming!

MISCONCEPTIONS ABOUT HANDICAPPED STUDENTS

CHRISSY RYDMAN

Many handicapping conditions are commonly considered to be forms of mental retardation when in actuality they are not. Chrissy Rydman discusses this misconception and others relating to the handicapped. Ms. Rydman draws her experience from working with handicapped students in Miami, San Antonio, Dallas, and College Station.

Frequently, when someone says "handicapped" it is thought to mean retarded. This is reinforced by the fact that many tests help to label students with other handicapping conditions as retarded, because of the students' poor learning or impairments. Because of this misconception I want to start by describing some of the other conditions.

I am going to go quickly through the different handicapping conditions to show how they compare with mental retardation. One of the most physically handicapping conditions that you will see is cerebral palsy. Cerebral palsy is caused by brain damage. It can happen in utero or any time during your life. Any one of us here could become cerebral palsied from a car accident or from a head injury. Different areas of your brain that get damaged affect different parts of your body. Some people are quadraplegic, which means they are paralyzed from their neck down, and usually their speech is affected too. Some are hemiplegic, which involves one side. These can usually walk. Diplegic is either upper or lower half.

Almost all cerebral palsy results in speech problems and that is one of the things that makes it hard for us who talk normally — they come in and their speech is funny and the first thing we do is either talk to them like they are children or we talk very loudly. I think that if you are getting someone like that in your class or are doing workshops with teachers who will be getting them, you should do some role playing. The easiest thing to do is to joke with them about their handicapping condition and to recognize it and to ask questions about it. You want to know why they are that way; you want to ask questions, and you should so that everybody will know and relax. You should encourage the other students in the class to ask, too. That makes it easier.

The next handicapping condition that you will see that is physically handicapping is spinabifida. It is a birth defect. It happens in utero, and is non-progressive, which means it does not ever get any better or worse. Spinabifida is an opening of the spinal column, and the higher up it is, the more involved the handicap.

Another physically handicapping condition is muscular dystrophy. It is a birth defect that is carried in the female and is passed almost exclusively to the male offspring. It is terminal; these people almost always die between 18 and 25. By the time some of these students are 16 or 18 they are so weak they cannot even push their own wheelchairs but they have a mind just as active as anybody else's and they still have to do something in the area of work. They have to be able to have a useful life as long as they live.

Another handicapping condition is a speech impediment. This is difficult for other students to deal with and they make fun of it. We need to explain why students are speech impaired.

The other two physically handicapping conditions are blindness and deafness. Often in the public school there are mobility specialists and interpreters available through service centers, but usually the right people do not know they are available. These specialists can help you decide what direction those students should go in vocational education. As I said, for many of these students everything in their school record will indicate that the students are retarded. You need to look, therefore, at several things when you get students' files. First, look at how long they have been in special education. That can help you determine when they were first labeled retarded. Then look at how long they have been "handicapped." If they have cerebral palsy, did it happen last year in a car accident, last year on a motorcycle, or did it happen at birth?

For example, we had a boy that was quadraplegic. He was shot in his neck when he was ten years old. Until that point he was normal and very bright, but because he could not write, he was labeled retarded. So I think it is very important to look at when the handicapping condition occurred — whether it was at birth or by an accident.

One of the tests used at the vocational school is the Valpar, a vocational assessment test that is a work sample. It takes a student three weeks to go through this assessment to figure out whether he is good at a task and whether he likes it. I think it is a wonderful piece of equipment if you use it for things other than

assessment. If through the interest inventory you figure out what it is they want to do and then say, "Well, if you want to do that, see if you can do this," you can use the tool that is supposed to be an assessment as a training tool. You then get a better result in my opinion. Another thing we did was to add some items to the test which we felt the test left out. Use some of your own initiative. You know what they are going to do in the community and know what kind of job is available if they can do certain skills. You can make some of your own things and have them almost ready to go to work the day they go out to find jobs. One student who came through the assessment center was very bright. They wanted to put him in a sheltered workshop because he really could not do a lot of the things in the assessment center. We ended up fighting to have him put back into the regular academic program because he was bright enough to carry the academic loads, and going into a vocational program was not quite appropriate for him.

Some of you may have heard of the JEVS. This is another vocational work sample system; it costs about eight thousand dollars. It is a wonderful piece of equipment, from which you can get a lot of information, but you can also use it for training. Again, if you use it for just an assessment tool you are not going to get your money's worth. If you use it as a training tool, you will.

The Singer is another work sample that costs thousands of dollars. One work sample has a small engine and the cassette and screen tell you how to tear that engine apart and put it back together again. The student wears earphones so he does not disturb anybody around him. The test includes all the tools that you need to take the engine apart and put it back together again. If they want to be an automobile mechanic you can put them on the sample to see if they can do it, to see if they have the patience and the skill to go through with the sample.

To further describe these misconceptions I am going to tell you about some of the students I worked with at the vocational center in Dallas. One spinabifida boy was in high school, but not doing very well academically. They referred him to our school. He came through the assessment center and when he got through he did not really want to do anything that we had at the center. He very politely explained to us that he had been working for two years, liked his job, and did not see any reason why he had to come to our school and get trained in one of the VEH classes for something he did not want to do. So we released him and let him go back to his job, which we should have done in the first place. It was just incredible.

Our zero reject team found a girl about seventeen years of age. One of the neighbors had said, "Oh yes, there is a girl that is handicapped just down the road in that house. She doesn't come out much." She is very, very involved cerebral palsied and has no intelligible speech. Within three months of school she learned how to read on the second grade level by using a pointer that we attached to her head. She was seventeen years old and if she had been in school and gotten some training before that point she would really have been doing well. She has total control of her head and can do almost anything with that head pointer. We taught her how to type with it in three months. She is doing math; she needs a lot of help, especially somebody to write for her, but what we were getting out of her mind was incredible. She is such a good example of somebody who has cerebral palsy, who people chalk up as retarded, especially because she could not talk.

Another is a muscular dystrophy boy who is in a regular business law class right now. He was very bright and we sent him through the academic/vocational route where he was learning business typing, and how to use the business machines. He ended up going through the business magnet school, not in the VEH class but in the regular classes. He was put in the class for mentally retarded students when he was very young. He went all through school with other mentally retarded students modeling himself after them. We got him into a regular school and he is doing real fine. He worked last summer in a post office doing typing.

Another student was put in special education when he was in the first grade because he could not read and was not acting right. Now he will tell you what it was like: "I had the same teacher for three years and we used the same second grade book for all three years. I wasn't learning out of that book." He would sit there and tell you these things that would just blow your mind and you knew he was not dumb or he could not have figured out all those things. But he could not learn to read. He had been in that same book with the same teacher. In those self-contained classes they often do have the same teacher three years in a row. I think there ought to be a law that you can only have the same teacher twice. This boy is in general construction now, is going to graduate this year, and already has a job lined up with Fox and Jacobs, an excellent construction company in Dallas. He will make a lot of money. He is not retarded; he just has a learning disability and cannot read.

Try every single solitary way you can think of to work with a student, and when you run out of ways get one of the others in your class to try to think of a way. Marc Gold's big thing is Try Another Way and I really believe that. Like this boy says, "If they would have just given me another book." He was sick of looking at that book. Even if he could have figured it out, he was not going to. He is real stubborn and just flat was not going to read because he was sick of the book.

One of our students had been kicked out of three high schools when he came to us, but there was nothing emotionally disturbed about him. He was just very frustrated. He is happy now, but there was no miracle cure or anything like that. The change came because he quit having to put up with something that was not necessary to his life. He got to where he could earn some money and felt valuable so his concept of himself increased a little and it did wonders. He ended up helping some of the other students in his class.

The Try Another Way does not mean that you cannot go back to one of the ways you tried before. It just depends on what day it is. Two girls labeled educable mentally retarded had been in special education all their school age lives. They were being trained to be maids in a hotel or a dormitory but one girl would come in crying and hide under the bed. If you could not find her she would be under there crying, perhaps because someone looked at her funny on the bus. The other girl wanted to go into child care. Her mother owns a child care center and that was all she really wanted to do. The Dallas Independent School District has what they call developmental centers for severely and profoundly handicapped children. They have to have their diapers changed and have to be fed and a lot of things like that. Because of her mental level she could not ever have the responsibility to work in a day care center and be responsible for children, but she could go in and clean the day care center and change diapers and feed the children. She is now working at the developmental center in the school. She is not getting paid but she will get paid when she graduates. She is very happy. I do not know what we will do with the first girl. She always jumps from one thing to another. We have tried her in every different cluster in the school and we are still trying. These are some examples of students that came through the assessment. We do have some come through that we do not know exactly what to do with. There are often those that you lose control of and I do not know what will happen to them. I suppose they will probably be channeled back through the public schools.

We had one girl who was not handicapped until she was about 15. She was working in a Pizza Hut when she contracted encephalitis. She looked normal, and some days she acted normal, yet she really could not do anything. We worked with her and her teacher, who was really a good teacher but would get so frustrated that she would have one of the other students work with her. The other girl at the sewing machine next to her ended up teaching her how to sew. The girl went to a sheltered workshop which was real hard for her but she absolutely could never have been competitively employed because she could not even screw in a light bulb. That was just a real interesting kind of brain damage and it was hard for the family and her sisters. Her friends did not like her anymore and it caused a lot of counseling problems. She had a real hard time at the sheltered workshop because the other workers appeared to be at a lower level than she did. They gave her a job that made her feel like she was in charge of something and she ended up feeling good and is very happy there now. It was a hard transition because we were not sure what to do with her. We were not sure if that was the right thing. The doctors could not tell us if it was supposed to get progressively better, but it has been a year and a half and has not gotten much better. It was one of those things that will have to be followed for four or five years to see if she has gotten better.

In difficult or unusual cases you will not know immediately what to do with the students. That is when Marc Gold's philosophy of Try Another Way must be remembered. We must never give up on a handicapped person.

FEATURED SPEAKER

MARC HULL

Marc Hull requires no introduction to many educators in Texas. While completing his doctorate at Texas A&M University, Dr. Hull initiated and coordinated the Vocational Special Needs Program; he assisted school districts from McAllen to Amarillo, from Beaumont to El Paso. He has had a great deal to do with making Texas one of the national leaders in vocational special needs.

It is indeed a pleasure to be back. I have had a wonderful opportunity to listen to many of you and I have been thrilled with the variety and content of this conference. I have been thrilled with the insights that people are continually gaining through their experiences.

My task today is to wrap things up by interpreting the presentations to you and pulling together their main points. I think throughout this conference I have heard some wonderful things said. I have heard conflicting things said, too — to assess or not to assess, that is the question. I have heard from time to time heated statements. I am going to try to cut through the emotional overlay of everything and then maybe we can leave the conference with the feeling that we were listening to individuals, to people with very real needs and very real concerns. Whatever our background or insights or approaches may be, we do have a common goal. That common goal can unite us and can help us to overcome the barriers of communication.

One of the things that became infinitely clear to me as I observed this particular conference was the immense number of variables that one has to be able to control in order to insure that handicapped persons can succeed in the world of work and in vocational education. First, I saw an important variable called attitude. I have often thought about the need for us to have positive attitudes, but this conference gave me a much greater insight as to the need for us to have a positive attitude. Shirley Price and James Skains and Randy Gallaway were absolutely fabulous. I can only say I hope that you took advantage of hearing some or all of these persons. They are going to give me that bit of inspiration about not only sharpening my own attitude but being ever so aware of the attitudes that the handicapped persons with whom I am working have about themselves, about life, and about the prospects of life.

I took a quote from Randy Gallaway. I just love this quote; I will be using it for a long time and I hope that I can really give it greater meaning as I think it through even further. Interestingly enough, Randy did not give this as a major point — it just slipped out. He said, "I believe in giving kids protected opportunities to grow."

I saw in this conference that if we really are to control all the many variables that will lead to vocational preparation of a high quality for handicapped persons, we need to understand handicapped persons better. I think all of you, whether you went to sessions about dealing with handicapped persons, or you simply observed our interpreters interpreting or our seeing eye dogs leading, or whatever other things you learned about handicapped persons, that these insights are invaluable in that they are melting the ice and giving you a deeper insight. Nan Crowell had some excellent things to say about working with learning disabled students as did Ray Henke this morning. John Deupree, Dale Voorhes, and Harry Goette spoke about the problems of the seriously emotionally disturbed child. To me one of the most difficult problems that we are going to face is to learn to work effectively with the truly seriously emotionally disturbed student — not simply the socially maladjusted child. Chrissy Rydman on mental retardation, Bob Alcorn on the

deaf, Pat Pound on the blind, and Donna Williams on the physically handicapped — you could not be in all places at one time, but if we have a good conference report coming out of here you can definitely gain insights about handicapped persons from this conference. We learned a lot about attitudes expressed by handicapped persons themselves. We had an opportunity to learn about specific handicapping conditions. There was also an opportunity given to learn about the programming strategies, curriculum development, support services, materials selection and adaptation, and teaching methods.

Owen Hill had a fabulous presentation on his ways of learning to control the classroom, the physical environment, the curriculum, and even students. I do not say this to put Owen down, but when you consider that Owen did not even get through high school himself, I consider him the finest vocational teacher that I have ever met who works with handicapped persons. It just allows you to see that it is not necessarily our educational background but our ability to pull it all together and to hang in there and be able to stay on the job with the people who are learning job skills. Elise Millikin gave a wonderful presentation on the skills for vocational adjustment coordinators and her approaches to on-the-job training.

Among the other two or three domains that I saw stressed at this conference that I am particularly grateful for, one I would give my mental and emotional assent to its importance was the tremendous amount of information given on assessment. It is very clear that you, in Texas, are in a state of ambivalence. It is very clear that even those of you who have come with a very strong educational psychology background have ambivalence. You hear one person, such as Marc Gold, say, "Teach, don't test." In reality, if you know Marc and look beyond his words, there is probably nobody in the country who does more assessing. The difference is that he does it so entwined with the teaching aspects of his work that you are unaware of the fact that he is doing a constant assessment, that he is constantly getting information about the child and responding to that level of information through feedback. So, although he said do it because you have to, in reality he teaches that you cannot do without *constant* assessment. The difference is between a once-for-all evaluation or a constant one.

I received a lot of insights about vocational rehabilitation at this conference and for the first time in my life I began to see why vocational rehabilitation spends a lot more time assessing. But remember that the persons who are working from the rehabilitation model are not teaching them in the classroom; they do not see them there everyday. They do not see them at 9:00 in the morning and have a chance to get all that body language and understanding about students and students' attitudes and capabilities and aptitudes that you and I see. It helped me a lot to begin to realize that these people have to gather data because they are going to make a critical decision about that person's vocational career and they have to base that decision on the best information, the most transferable information, the most generalized information they can. They have a different mind set because they have a different educational structure from what you and I are working under.

I benefited from that insight and I hope that those of you who feel this ambivalence about assessment will not leave the conference saying we did not come to any conclusions about assessment. I think we did. I think we came to the right conclusion — that we get all the information we possibly can about an individual as long as that is relevant and useful information and we can put it to work. It really does not matter how much money we want to spend on this or that system. It was a beautiful contrast. I only wish that Marc Gold had given his 20-minute talk on assessment and then Ray Henke had given his. You would have seen beautiful melting of minds, of different backgrounds. Yet both persons are totally competent in what they do for people. I would not for a moment worry about whether I entrusted my son with Marc Gold or with Ray Henke or with Jane Francis, Tom Sanford, Tom Toleman, Mike Peterson, Pam Hill, or Don Hancock, or any of the other people who spoke on assessment. I came away with confidence that any one of them, even though they use different methods and have ultimately the same results, would know my child and be able to sit down with me and talk about my child and the way she is actually functioning. They all could help me and my child and the school system find that little niche that is all so important for those of us who want to lead a successful and happy life. So please do not feel that we did not resolve this thing. We looked at its complexity and were able to see that it is the level of commitment that we have. There is certainly no conflict between clapping for Marc Gold when he says, "Teach, don't test," or clapping for Ray Henke when he just absolutely thrills you with his insight into what it means to test the child's ability to move with stress and to move without jerky movements.

Another thing that I saw in the conference that I am delighted about is that our state level leadership remains positive. You may say, "Well, I am getting a little nervous about these laws that are still hanging over us. What are they going to do to us with those laws?" I can assure you that your state leaders in administrative positions have no greater love for laws and regulations than you or I do. You have got to tie the system together somehow. You have to get certain objectives accomplished. I do not think that you will find that your state leaders or administrators are really tied into regulations in a way to put us down.

I have felt a very, very positive affinity for your new director of vocational education and I hope that you will give him a chance. I know that he is no more a vocational person than I am, but give him a chance. I hope that you will take those words under serious consideration because I know what it means to have to give state leadership where there are infinite needs and ever so finite resources. It is very, very difficult.

So we have seen good things in this conference. Here is what I would like to say about working with these thousands of variables we have heard about this morning. There are absolutely too many variables for you or me to put together in order to have success in vocational education for the handicapped. But even if we cannot achieve perfection, we can have a goal. What would my goal be with these thousands of variables that we have heard about that have to come together in a particular way in order for vocational education for handicapped persons to be successful? My goal for the future is this: I am striving and I am working for a day when being handicapped is no longer of any predictive value in terms of one's career choices, in terms of one's career options, in terms of one's career training; that because a child is handicapped, this does not predict where I am going to put the child, it does not predict how I am going to assess the child, it does not predict where that child is going to go. Shirley and James and Randy gave me an absolutely firm seal of approval on that goal. We cannot allow the word handicapped, or sex, or race, or limited English speaking ability to interfere with a person's education. Our goal is to make these labels non-predicting so that every opportunity that we have in vocational education is available to any individual irrespective of his or her makeup, be it handicapped or not handicapped.

One of the things that I have learned over the years is that we must continue to grow if we are really ready to make big accomplishments. I read an article not long ago by Beverly Sills. She said, "If I had the opportunity to deal with five or six young virtuosos in the field of music and I were to give them advice as

to what they should do, I would say to them, 'Don't go to college. Find yourself a mentor, someone that you can relate to as an individual and then go out and take every opportunity that comes your way to sing. Open up the bullfights if you have to. Sing at the ball game. Sing in church. Go to the nursery and sing some lullabies. Go everywhere you can to put your skills to work and listen to your mentor.'"

There have been thousands of bits of information given to us at this conference, far more than any of us can assimilate and package and somehow come out with a changed behavior. But find that person who gave you good insight, find that mentor, and if you will go back to that person that had special insights, you will learn. If that person is not at this conference, look for that person in your neighborhood, look for that person in your school. Utilize the resource room teacher, the diagnostician, the special education counselor, the vocational education counselor. Find somebody that you can form a learning alliance with. Find someone that you can enter into a cooperative relationship, a mentor relationship with, and then practice, one child at a time, one learning objective at a time, one new instructional material at a time, one new assessment insight or technique at a time. Then we can do it. Then we can take the prediction out of being handicapped!

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